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ABSTRACT

This document contains materials for games which are intended to give teachers and parents of young children ideas for making learning games which will provide experiences appropriate to their interests and abilities. While the games may be used by children in small groups, they were designed primarily for the child to explore alone. The games are described and organized in a sequence of three basic concepts: objects can be organized according to shape, color, and size; objects can be organized by their identity; and objects can be organized according to relationships. These concepts are then developed in a series of 64 games through which the child may discover organizational relationships. The purpose of the games is to help children transfer concrete knowledge into abstract concepts. This document also contains a paper entitled "Language Arts Games as a Bridge to Reading" by Linda Clary. (TS)

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GAMES GRAFFITI: Language Arts Games to Make for Young Children

by

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MICROWORKSHOP

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002 682

AUTHOR'S INTRODUCTION TO GAMES GRAFFITI; Rationale for the Games Approach to Early Learning Experiences

by

Mary Anne Christenberry

The research of Piaget and others has indicated that it is imperative for children to interact with real objects in order to learn about and, indeed, to create their cognitive world.

Kamii and DeVries state that it is necessary for children "...to manipulate objects in order to develop their physical, logico-mathematical, and spatial knowledge because it is only by dealing with reality that children can transform reality... 'manipulating' should mean 'using objects constructively' with a well-defined aim (at whatever level)..." a child is working, and the child should not be "...just manipulating objects in haphazard pushing, pulling, and fooling around." (Kamii & DeVries, 1973, 31-32). This appears to me to be a clear argument against much of the random "free play" activities we customarily provide for young children in typical kindergarten and other early learning situations.

In early education, we are usually highly concerned with the child's intellectual or cognitive development, urged on by parents, school district personnel, and by our own personal philosophies. But what is the BEST way to accomplish this? Kamii cites from the writings of Piaget that "...our comprehension of reality... precedes and largely determines how we react to it. Whatever specific objective we may define in education must... support and enhance qual-

ties such as autonomy so that intelligence can develop as a coherent, powerful whole." (Kamii, 1975, 201). And, indeed, some of the most important issues today in early education are concerned with the objectives of our programs, most specifically what we should try to teach, why, and how. I believe that the most important part of this question may be why and that it is crucial that objectives for early education be solidly grounded in developmental theory supported by research. I share with Kamii her concern that if we continue to give children ready-made answers and endless workpapers with only one correct answer and toys with only one use, we may fail to educate children to deal logically with reality itself. Kamii says that by "...compartmentalizing academic skills and separating them from the development of intelligence, schools too often produce passive students who want to be told what to think next." (Kamii, 1975, p. 203).

Almy has clearly defined the difference in types of knowledge we deal with in teaching young children. She defines PHYSICAL KNOWLEDGE as "...knowledge that can be inferred directly from observation of the physical world" and states that it differs from LOGICO-MATHEMATICAL KNOWLEDGE, which is "...knowledge that individuals construct from their own actions on the physical world." (Almy, 1976, p. 93) In most classrooms, we probably see more physical knowledge, or social learning, being attempted by the teacher where the child is asked to make many inferences which may be beyond his capabilities at that time to formulate and

interpret, than the logico-mathematical knowledge at which the child arrives through his own action on elements in his world and through which he creates his own intellect. Piaget, himself, in discussing representative intelligence, gives us some insight into his ideas about the child's progression in cognitive development:

"Representative intelligence begins with the child's systematic concentration on his own action and on the momentary figurative aspects of the segments of reality with which this action deals. Later it arrives at a decentering based on the general coordination of action, and this permits the formation of operatory systems of transformations and constants or conservations which liberate the representation of reality from its deceptive figurative appearances." (Piaget, 1969, p. 128).

It was with this in mind that the authors of GAMES GRAFFITI developed these games and attempted to organize them in a purposeful, meaningful manner. We sought to implement, through the games, some of the ideas concerning the development of a child's understanding gleaned from our study of theorists, particularly Piaget, and those who are currently attempting to implement his ideas in early education.

The games described in GAMES GRAFFITI are organized in a sequence of three basic concepts:

- I. Objects can be organized according to shape, color, and size
- II. Objects can be organized by their identity
- III. Objects can be organized according to the relationships

These concepts are then developed in a series of 64 games through

which the child may discover for himself organizational relationships. Every attempt should be made by the person constructing the games to make them attractive, interesting, and available to the child. Attempt to arouse his interest and his curiosity because, "...according to Piaget,...If intelligence develops as a whole by the child's own construction, then what makes this construction possible in the child's curiosity, interest, alertness, desire to communicate and exchange points of view, and a desire to make sense out of it all." (Kamii, 1975, p. 201)

It is the desire of the authors of GAMES GRAFFITI that teachers who choose to construct these games will use them to the benefit of the children under their direction and that they will reflect the teacher's awareness of the way children think and that these games will support and facilitate that thinking, the essential difference between classrooms using Piaget's ideas and others according to Almy (1976, p. 96).

Learning games may be used by teachers and parents of young children to provide experiences appropriate to their interests and abilities. Using games for concept learning is a delightful approach to learning. While the games we are presenting today may be used by children in small groups, they were designed primarily for the child to explore by himself. The games are arranged in a sequence developed from extensive study of current research in child development.

The purpose of the games is to help the child transfer concrete knowledge into abstract concepts. The ideas in the games are basic and are adaptable for use in classrooms from kindergarten through third grade.

REFERENCES

- Almy, Millie. "Piaget in Action," YOUNG CHILDREN, vol. 31, #2, January, 1976, pp. 93-96.
- Kamii, Constance. "One Intelligence Indivisible," ONE CHILD INDIVISIBLE, (J.D. Andrews, ed.). Washington, DC: NAEYC, 1975.
- Kamii, Constance and DeVries, Rheta. "Piaget for Early Education" from unpublished manuscript to be published in M.C. Day and R.K. Parker (eds) THE PRESCHOOL IN ACTION (Second Edition) by Allyn and Bacon, 1973.
- Piaget, Jean and Inhelder, Barbel. THE PSYCHOLOGY OF THE CHILD. (Trans. from French by Helen Weaver). New York: Basic Books, Inc., 1969.

These learning games represent an interdisciplinary approach to education. Early childhood education and reading are teaming to help children learn. For years now, we have talked about the importance of what the child does before he comes to school and how that relates to his later success, particularly in reading, and we have practiced the concept of readiness in first grades. Unfortunately, readiness has often meant forcing a child through a program, regardless of his developmental state. There are many, many schools where all first graders get the same readiness program and all begin to read on the second Tuesday in October, regardless of their individual characteristics. However, reading educators and linguists in recent years have stressed the importance of language development to reading success, and, according to Piaget, language reflects rather than determines cognitive development. However, he says that special linguistic programs will not help children whose cognitive level does not allow comprehension of what they talk about. Frank Smith also emphasizes that reading involves the translation of visual symbols for language into meaning. We also know that thinking and speech occurred much earlier and existed for a long time without reading. Written language is dependent on spoken language, and spoken language has to be stimulated to develop the concepts that lead to understanding.

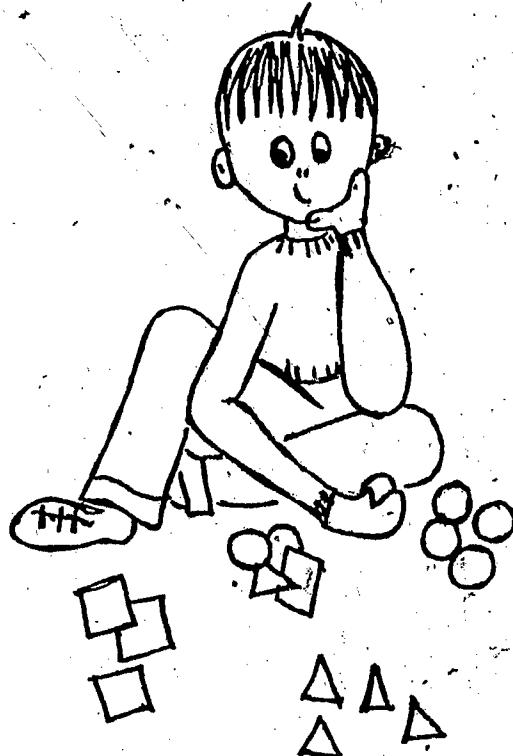
Here's where early childhood education and reading can team up. Early childhood specialists have contact with children earlier than reading teachers, and, by providing activities that help the child develop cognitive abilities, they create a need for language. The child must then use language meaningfully, and this use leaves the child to later being able to derive meaning from the printed form of language. This task is essentially what reading is and illustrates how these learning games can lead to reading and language arts success for the young child.

LEARNING GAMES TO MAKE
FOR LITTLE CHILDREN

GAMES GRAFFITI

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MARY ANNE CHRISTENBERRY, PH.D.
CAROL EUBANKS, M.Ed.
CRYSTAL LEFTHERS, M.Ed.



GAMES GRAFFITI

LEARNING GAMES TO MAKE FOR YOUNG CHILDREN

by

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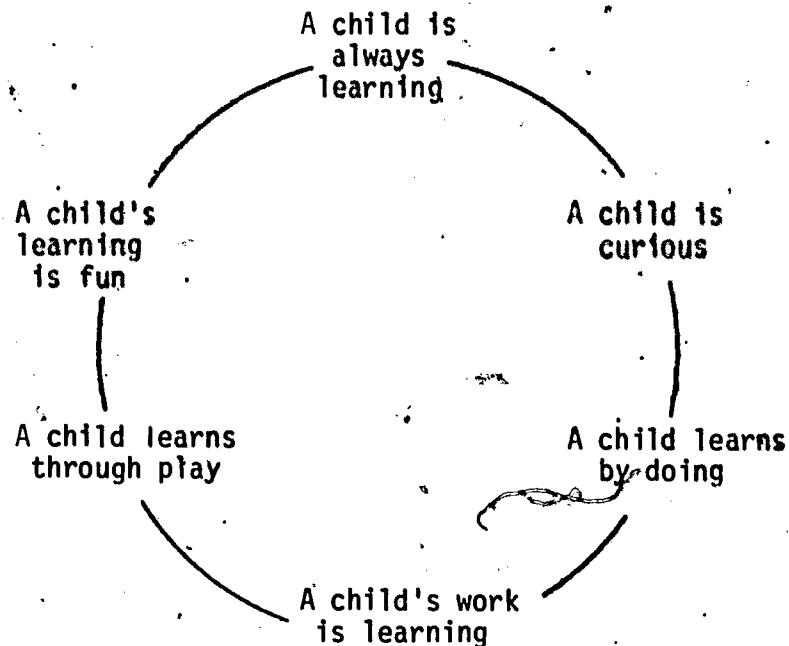
who believed in us and encouraged us
to continue developing these games.
She has an extraordinary ability to
inspire her students to attempt and
to accomplish.

Illustrations by

Crystal Leathers and Carol Eubanks

Typing by Mary Ethridge

Graphics by Waldo P. Harris III



TO THE READER:

These GAMES are intended to give teachers and parents of young children ideas for making learning games which will provide experiences appropriate to their interests and abilities. While no ages are specified, the GAMES were designed with very young learners in mind.

Using games is a delightful approach to learning, shared by the child and his parent or teacher. While the GAMES may be used by children in small groups, they were designed primarily for the child to explore by himself. The SEQUENCE of these GAMES was developed from extensive study of current research in child development. It is suggested that the child BEGIN with CONCEPT I and proceed in the given order. The CONCEPTS and the GAMES build from the beginning to the end in a developing SEQUENCE. The foundation for each CONCEPT depends upon the previous CONCEPT.

The main purpose of these GAMES is to help the child transfer concrete knowledge into abstract concepts. Therefore, encourage the child to VERBALIZE as he uses the GAMES, even when he is working alone. Every time he knows what something is, encourage him to talk about it. (E.g. "The boat is blue. The sun is yellow. Here is a triangle. This is a circle.") Also, encourage him to describe what he is doing. (E.g. "I am putting the train here.")

Basic to the concept of organizing skills is the child's understanding of the meaning of such words as:

alike	all	bigger	next	similar
different	some	smaller	last	little
the same as	none	large	first	a bit

Many children confuse the meaning of these words. Try to clarify them with the child if he appears uncertain of their meaning and use.

The ideas in these GAMES are basic and are applicable for use in Sunday Schools, Bible Schools, or Church Kindergartens, using pictures from Church literature. The authors hope that teachers and parents will take these ideas and develop similar GAMES and activities of their own appropriate to the needs and interests of their children.

Mary Anne Christenberry
Carol Eubanks
Crystal Teachers

SEQUENCE OF CONCEPTS AND GAMES

CONCEPT I: OBJECTS CAN BE ORGANIZED ACCORDING TO SHAPE, COLOR, AND SIZE

	Page
I-A: Objects can be grouped by shape Games 1-3 Game 4, Evaluation of I-A	2
I-B: Like objects can have different color Games 5-6 Game 7, Evaluation of I-C	3
I-C: Different objects can have like color Games 8-9 Game 10, Evaluation of I-C	3
I-D: Like objects can be different sizes Game 11-14 Game 15, Evaluation of I-D Game 16, Evaluation of CONCEPT I	4

CONCEPT II: OBJECTS CAN BE ORGANIZED BY THEIR IDENTITY

II-A: Objects of similar appearance can be grouped according to their similarity Games 17-21 Game 22, Evaluation of II-A	6
II-B: Objects of similar nature can be grouped according to their similarity Games 23-31 Game 32, Evaluation of II-B	7
II-C: Objects with similar uses can be grouped by their purposes Games 33-34 Game 35, Evaluation of II-C Game 36, Evaluation of CONCEPT II	10

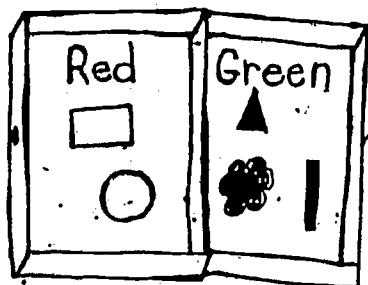
CONCEPT III: OBJECTS CAN BE ORGANIZED ACCORDING TO THEIR RELATIONSHIPS

III-A: Separate parts can be arranged to form a meaningful whole Games 37-41 Game 42, Evaluation of CONCEPT III-A	11
III-B: Objects can be used together to perform a meaningful purpose Games 43-46 Game 47, Evaluation of III-B	12

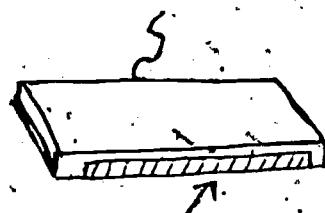
III-C: The same objects can be arranged to occupy space differently Games 48-52 Game 53, Evaluation of III-C	13
III-D: Objects, because of similar nature, belong together Games 54-57 Game 58, Evaluation of III-D	15
III-E: Particular actions evoke predictable, observable effects Games 58-60 Game 61, Evaluation of III-E Game 62, Evaluation of CONCEPT-III	16
OTHER GAMES YOU MAY WISH TO MAKE Game 63 Game 64	17

CONSTRUCTION AND USE OF THE GAMES

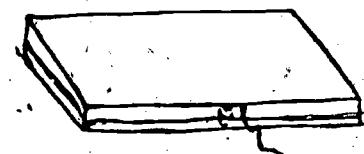
1. All games are designed to be constructed in boxes, such as hosiery boxes.
2. All materials are things you may already have at home or school; or which you may easily obtain from local stores.
3. Use three-dimensional items when possible but if you cannot find them, mount pictures from magazines and old workbooks on heavy cardboard.
4. When the term "shadow" is used in a game description, it refers to a black shape in the box, which is exactly the size and shape of a loose object in the game. The "shadow" provides a built-in self evaluation for the child: if the object fits the "shadow", he knows that his answer is correct.
5. The boxes may be taped together with wide tape on one side to make a type of hinge. A fastener made of a brad and string may be placed on the opposite side to insure a secure closing for the box and to keep loose objects from spilling out.
6. The inside of the box and the loose objects in the games may be covered with clear contact paper for longer use.
7. Encourage the child to put away one game with all parts in it before he uses another one.



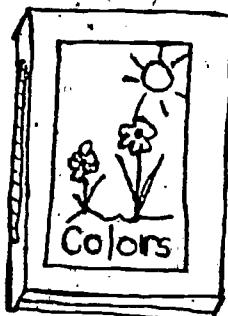
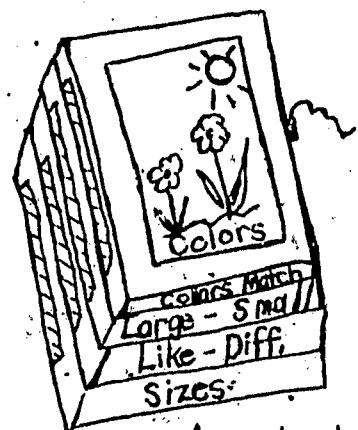
Box open



Masking tape hinge



Brad and string fastener

Cover top of box
with colorful
pictureLabel along end.
Easy to store
on shelves. Choose
one you want from
the labels.

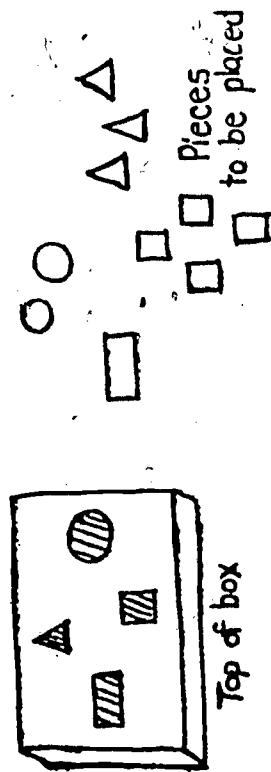
THE GAMES

The GAMES are printed on only one side of the paper so that you may cut them apart to file, to place in the box with the GAME, or to use in any way convenient and helpful to you.

CONCEPT I: OBJECTS CAN BE ORGANIZED ACCORDING TO SHAPE, COLOR, AND SIZE

CONCEPT I-A: OBJECTS CAN BE GROUPED BY SHAPE

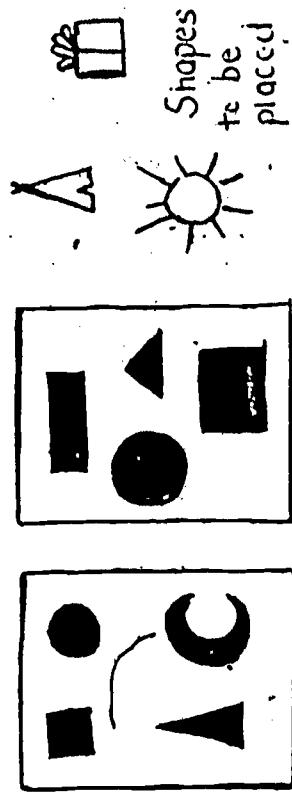
- Game #1
Gathering: Heavy cardboard, wood, or sponge cut in shapes of circle, triangle, rectangle, and square.
box at least $1\frac{1}{2}$ " deep.
Making: Cut out holes in top of box slightly larger than geometric-shaped objects.
Using: Child drops objects in appropriate holes.



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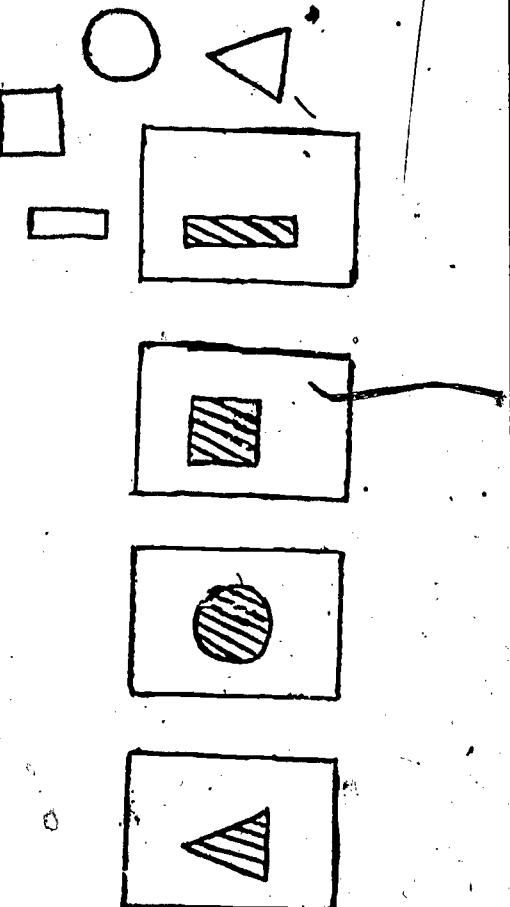
CONCEPT I-A: OBJECTS CAN BE GROUPED BY SHAPE

- Game #2
Gathering: Cardboard; pictures in geometric shapes.
Making: Glue "shadows" of all shapes in box; mount shapes on cardboard.
Using: Child matches pictures to "shadows" in box.



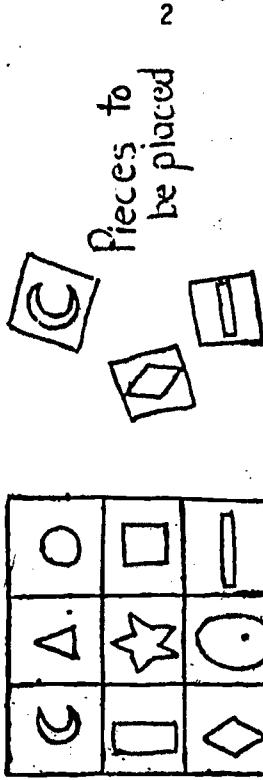
CONCEPT I-A: OBJECTS CAN BE GROUPED BY SHAPE

- Game #3
Gathering: Four pieces of heavy cardboard, 6"X8".
Making: Cut 3" circle, square, rectangle, triangle from middle of each cardboard as shown.
Using: Child fits shapes into matching holes, or may trace the shapes.



CONCEPT I-A: OBJECTS CAN BE GROUPED BY SHAPE

- Game #4
Gathering: Cardboard, 6"X6", ruled into 9 squares $1\frac{1}{2}" \times 1\frac{1}{2}"$; 9 cardboard squares $1\frac{1}{2}" \times 1\frac{1}{2}"$; felt in 9 different shapes and colors.
Making: Glue a felt shape on each section of 6"X6" card. Mark small cards with outline of matching shapes.
Using: Child covers shapes on large card with matching shapes.



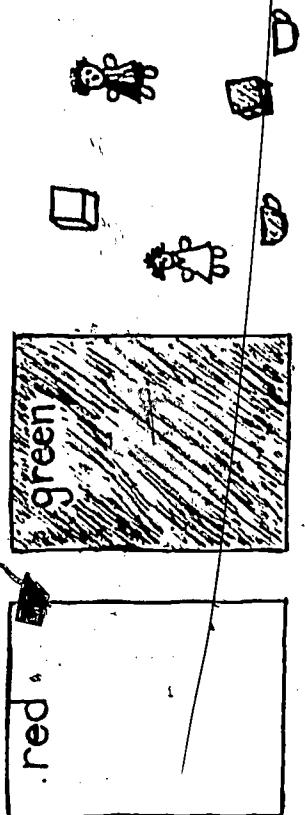
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CONCEPT I: OBJECTS CAN BE ORGANIZED ACCORDING TO SHAPE, COLOR, AND SIZE

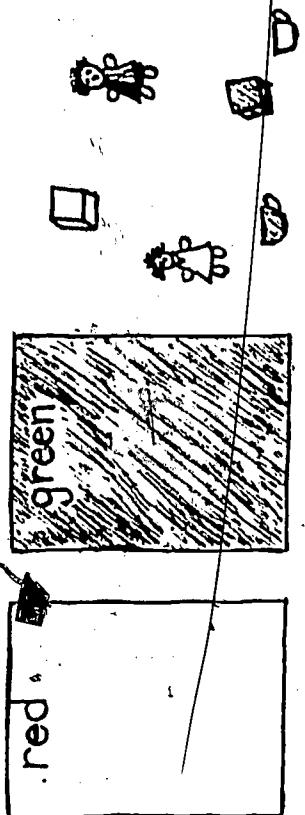
CONCEPT I-B: LIKE OBJECTS CAN HAVE DIFFERENT COLOR

Game #5
Gathering: Construction paper - 1 red and 1 green sheet; plastic toys, blocks, etc. in red and green.
Making: Glue green construction paper in lid, red in bottom of box.
Using: Child classifies objects by color, placing green objects in lid, red objects in bottom of box.



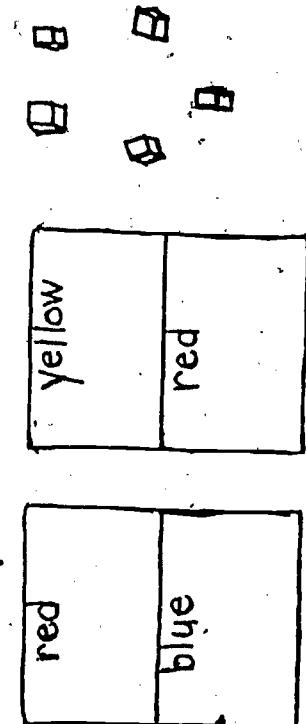
CONCEPT I-B: LIKE OBJECTS CAN HAVE DIFFERENT COLOR

Game #6
Gathering: Two pictures of children in different colored clothing; small plastic toys in same colors as clothing.
Making: Glue pictures in box as shown.
Using: Child places toys in box, matching colors of toys and clothing.



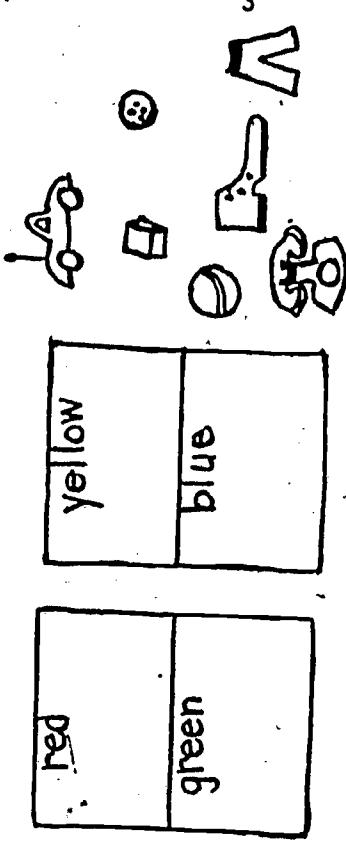
CONCEPT I-B: LIKE OBJECTS CAN HAVE DIFFERENT COLOR

(evaluation of CONCEPT I-B)
Game #7 Gathering: Construction paper in 3 colors: red, blue, yellow. Identical objects, such as blocks, in same 3 colors.
Making: Glue construction paper into box as shown.
Using: Child places objects in box, matching colors of blocks and paper.



CONCEPT I-C: DIFFERENT OBJECTS CAN HAVE LIKE COLOR

Game #8 Gathering: Construction paper in yellow, green, red, blue; small toys, blocks, buttons, etc. in these 4 colors.
Making: Glue construction paper in box as shown.
Using: Child places objects in box, matching colors of objects and paper.



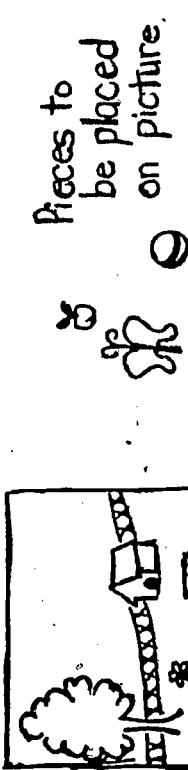
CONCEPT I-C: OBJECTS CAN BE ORGANIZED ACCORDING TO SHAPE, COLOR, AND SIZE

CONCEPT I-C: DIFFERENT OBJECTS CAN HAVE LIKE COLOR

Game #9 Gathering: Cardboard; outdoor picture of blue sky, green tree, red wagon, yellow flower, white dog-house, brown fence. Individual pictures of blue bird flying, green apples, red balls, yellow butterflies, white dog, brown squirrel. Glue or draw picture in bottom of box. Mount individual pictures on cardboard.

Making: Child places yellow butterfly on yellow flower, etc. as shown.

Using:



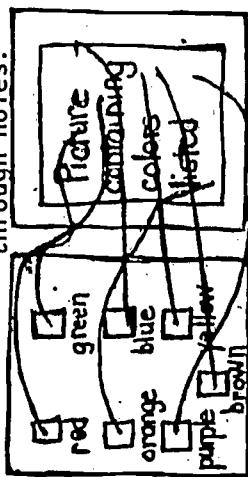
Pieces to
be placed
on picture.

CONCEPT I-C: DIFFERENT OBJECTS CAN HAVE LIKE COLOR

Game #10 (evaluation of CONCEPT I-C) Gathering: Picture with several major colors clearly in it; construction paper of same colors; yarn.

Making: Glue picture in bottom of box. Punch a hole in each major color in picture. Glue small squares of colored construction paper in box lid. Attach yarn to squares.

Using: Child matches colored squares to corresponding colors in the picture by stringing yarn through holes.



Game #10 (evaluation of CONCEPT I-C) Gathering: Picture with several major colors clearly in it; construction paper of same colors; yarn.

Making: Glue picture in bottom of box. Punch a hole in each major color in picture. Glue small squares of colored construction paper in box lid. Attach yarn to squares.

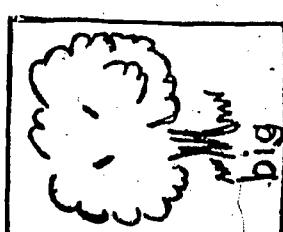
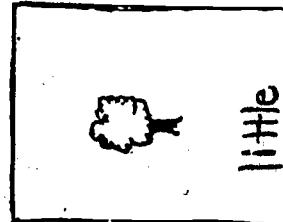
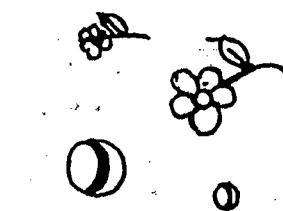
Using: Child matches colored squares to corresponding colors in the picture by stringing yarn through holes.

CONCEPT I-D: LIKE OBJECTS CAN BE DIFFERENT SIZES

Game #11 Gathering: Cardboard; an assortment of pairs of similar pictures, 1 considerably larger than the other.

Making: Glue 1 large picture in lid, and 1 small picture in bottom of box. Mount all other pictures on cardboard.

Using: Child matches large pictures to large picture, small pictures to small picture in box.

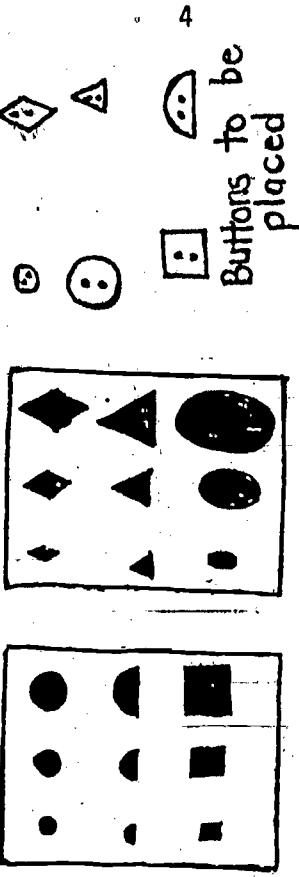
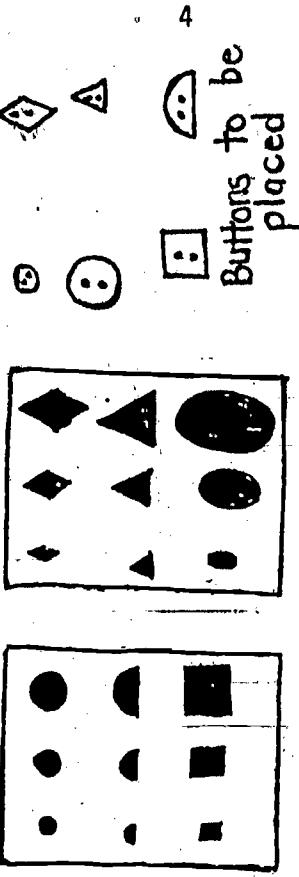
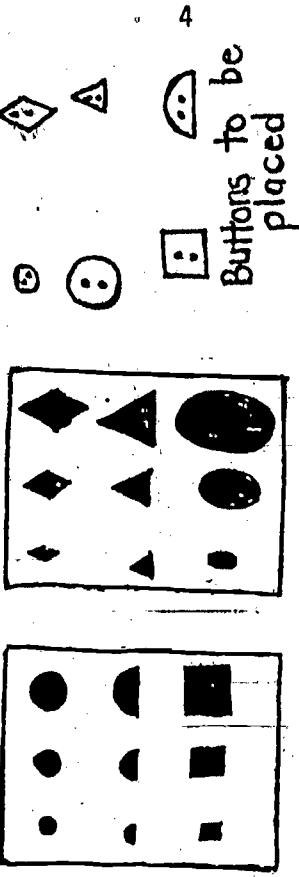
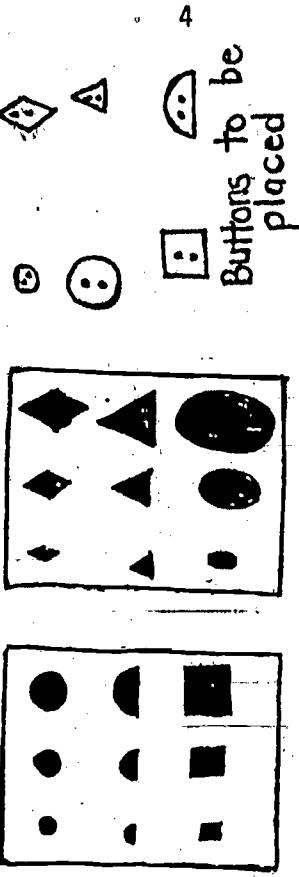


CONCEPT I-D: LIKE OBJECTS CAN BE DIFFERENT SIZES

Game #12 Gathering: Buttons or colored shapes backed with card-board in 3 graduated sizes.

Making: Glue "shadows" of graduated buttons or shapes in box as shown.

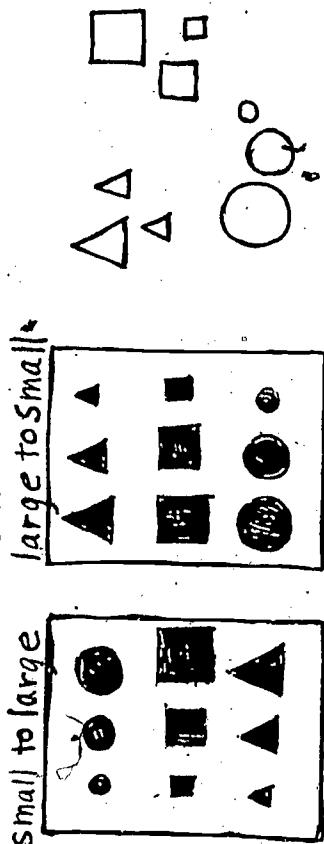
Using: Child places shapes on "shadows" of corresponding sizes in box.



CONCEPT I: OBJECTS CAN BE ORGANIZED ACCORDING TO SHAPE, COLOR, AND SIZE

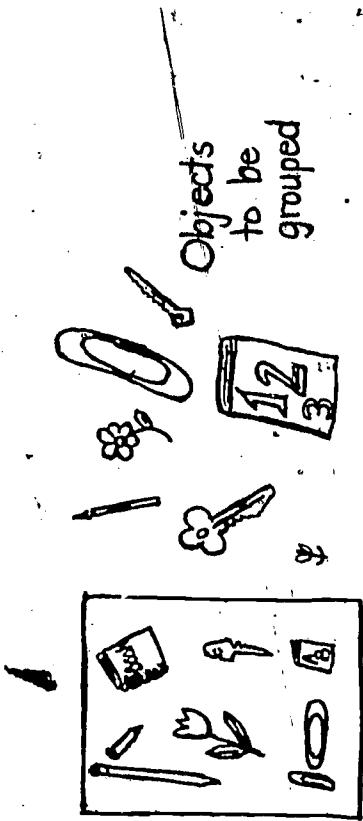
CONCEPT I-D: LIKE OBJECTS CAN BE DIFFERENT SIZES

Game #13
Gathering: Cardboard; shapes or similar pictures in 3 graduated sizes.
Making: Mount pictures or shapes on cardboard. Glue "shadows" in box as shown.
Using: Child places objects on "shadows" progressing from smallest to largest, then from largest to smallest.



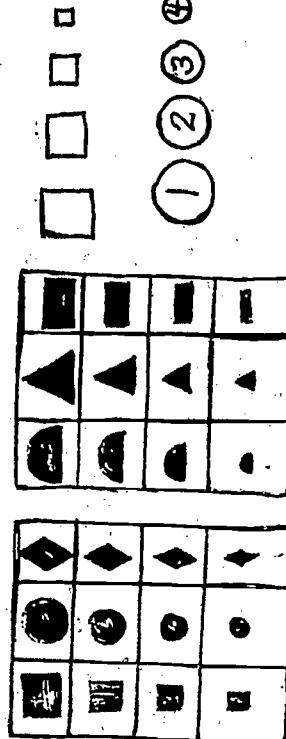
CONCEPT I-D: LIKE OBJECTS CAN BE DIFFERENT SIZES

Game #14
Gathering: Large and small objects - books, artificial flowers, paper clips, pencils.
Place objects in box.
Making:
Using: Child groups similar objects of different sizes together.



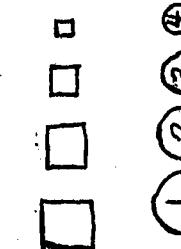
CONCEPT I-D: LIKE OBJECTS CAN BE DIFFERENT SIZES

Game #15
Gathering: Colored construction paper shapes in graduated sizes as shown. Make all squares red, all rectangles blue, etc.
Making: Glue "shadows" of all shapes in box. Mount shapes on cardboard. On back of each shape, place a number corresponding to size of shape (largest #1, smallest #4).
Using: Child places shapes on appropriate "shadows".

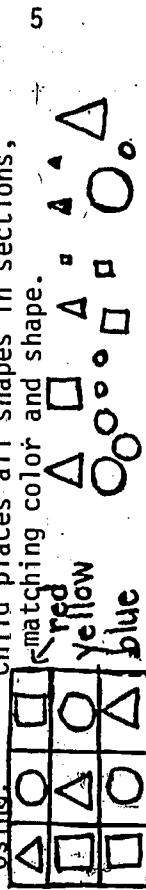


CONCEPT I: OBJECTS CAN BE ORGANIZED ACCORDING TO SHAPE, COLOR, AND SIZE

Game #16
Gathering: (Evaluation of CONCEPT I)
Cardboard - 2 strips, 10"X1", 2 strips, 8"X1"; construction paper in red, yellow, green.
Making:
Divide box into 9 sections with cardboard strips as shown. Cut the following graduated sizes: 2 red triangles, 3 red circles, 4 red squares, 5 yellow squares, 6 yellow circles, 7 yellow triangles, 8 green squares, 9 green triangles, 10 green circles. Glue 1 of the colored shapes in each section of box as shown. Mount other shapes on cardboard.



Using: Child places all shapes in sections, matching color and shape.



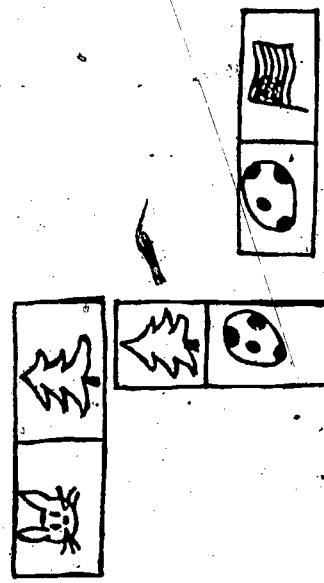
CONCEPT II: OBJECTS CAN BE ORGANIZED BY THEIR IDENTITY

CONCEPT II-A: OBJECTS OF SIMILAR APPEARANCE CAN BE GROUPED ACCORDING TO THEIR SIMILARITY

Game #17

Gathering: Cardboard, 2"x4"; holiday stickers.

Making: Divide each card in half with a felt-tip pen.
Place a holiday sticker on each half of card.
Using: Child matches identical pictures, as in dominoes.



23

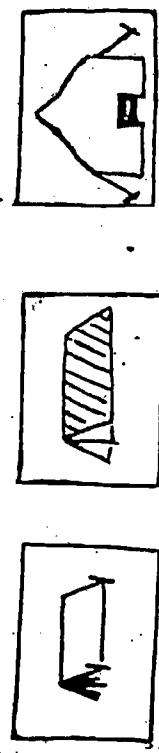
CONCEPT II: OBJECTS CAN BE ORGANIZED BY THEIR IDENTITY

CONCEPT II-A: OBJECTS OF SIMILAR APPEARANCE CAN BE GROUPED ACCORDING TO THEIR SIMILARITY

Game #18

Gathering: Cardboard, 2"x4"; magazine pictures.

Making: Glue picture of a commonly-used object on each card, making several 3-card sets with similar but not identical objects as shown.
Using: "Scramble" all sets together; child groups related objects.



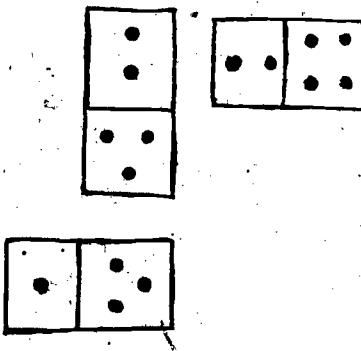
CONCEPT II-A: OBJECTS OF SIMILAR APPEARANCE CAN BE GROUPED ACCORDING TO THEIR SIMILARITY

Game #19

Gathering: Cardboard, 2"x4"; felt-tip pen.

Making: Construct a set of dominoes.

Using: Child matches number of dots on the cards.



CONCEPT II: OBJECTS CAN BE ORGANIZED BY THEIR IDENTITY

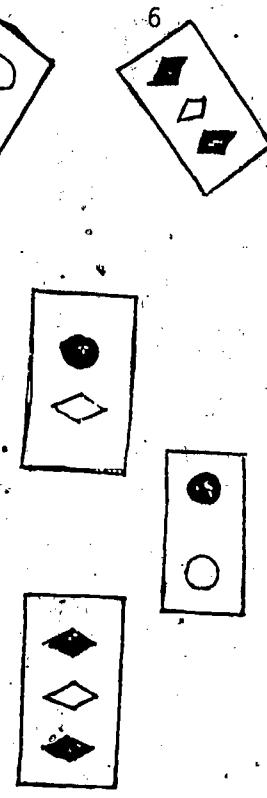
CONCEPT II-A: OBJECTS OF SIMILAR APPEARANCE CAN BE GROUPED ACCORDING TO THEIR SIMILARITY

Game #20

Gathering: Cardboard; identical patterns in various colors from wallpaper books.

Making: Make a variety of matching games, using your own imagination.

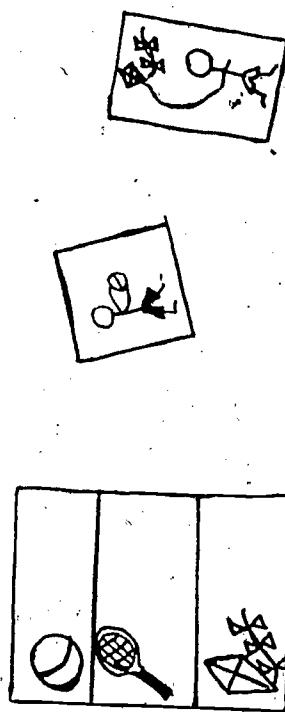
Using: Child matches cards by colors, patterns, or series of patterns as shown.



CONCEPT II: OBJECTS CAN BE ORGANIZED BY THEIR IDENTITY

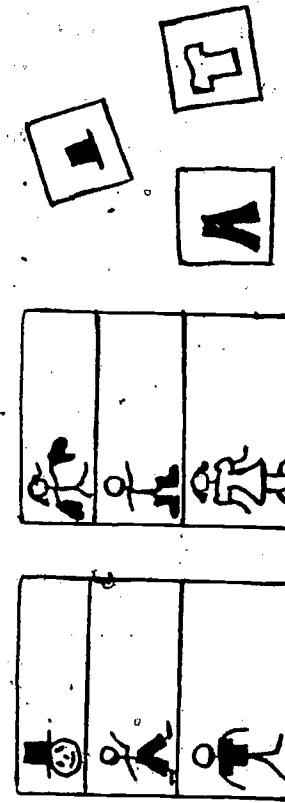
CONCEPT II-A: OBJECTS OF SIMILAR APPEARANCE CAN BE GROUPED ACCORDING TO THEIR SIMILARITY

Game #21 Gathering: Cardboard; several sets of pictures - 1 of a toy, 1 of a child playing with the same toy.
Making: Glue pictures of toys in box. Mount other pictures on cardboard as shown.
Using: Child matches pictures.



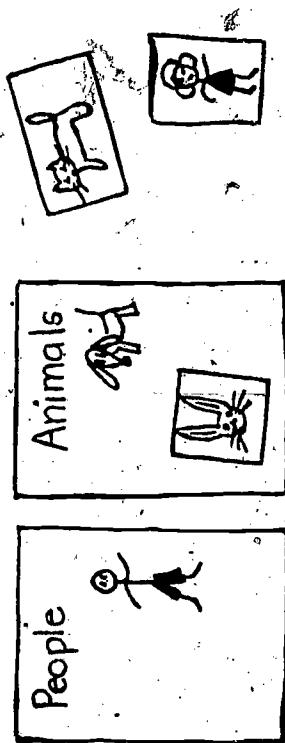
CONCEPT II-A: OBJECTS OF SIMILAR APPEARANCE CAN BE GROUPED ACCORDING TO THEIR SIMILARITY

(evaluation of CONCEPT II-A)
Game #22 Gathering: Cardboard; several sets of pictures - 1 of clothing and 1 of a child wearing the same clothing.
Making: Glue pictures of children in box. Mount other pictures on cardboard as shown.
Using: Child matches pictures.



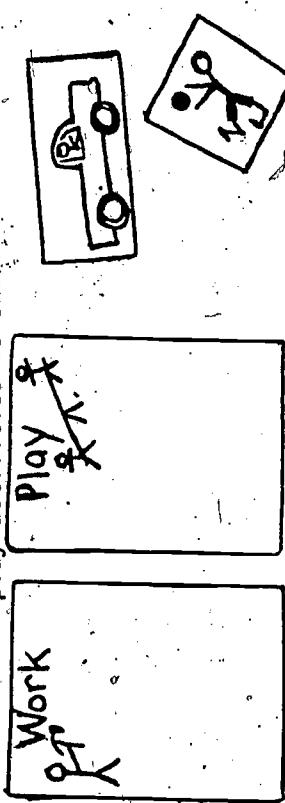
CONCEPT II-B: OBJECTS OF SIMILAR NATURE CAN BE GROUPED ACCORDING TO THEIR SIMILARITY

Game #23 Gathering: Cardboard; pictures of people and animals.
Making: Glue picture of a person in box lid. Glue picture of an animal in bottom of box.
Using: Child groups pictures of animals and people as shown.



CONCEPT II-B: OBJECTS OF SIMILAR NATURE CAN BE GROUPED ACCORDING TO THEIR SIMILARITY

(evaluation of CONCEPT II-B)
Game #24 Gathering: Cardboard; pictures of people working or playing.
Making: Glue picture of person(s) working in box lid; glue picture of person(s) playing in bottom of box..
Using: Child groups pictures according to work or play activities as shown.



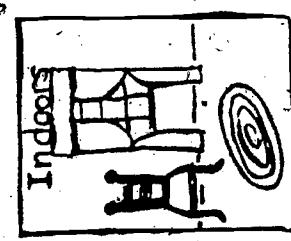
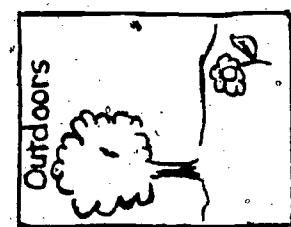
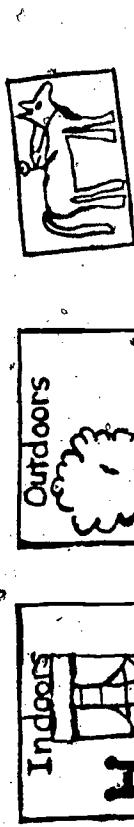
CONCEPT II: OBJECTS CAN BE ORGANIZED BY THEIR IDENTITY

CONCEPT II-B: OBJECTS OF SIMILAR NATURE CAN BE GROUPED ACCORDING TO THEIR SIMILARITY

Game #25 Gathering: Cardboard; pictures of indoor and outdoor activities.

Making: Glue an outdoor picture in box lid; glue indoor picture in bottom of box; mount other pictures on cardboard.

Using: Child groups pictures according to activity.

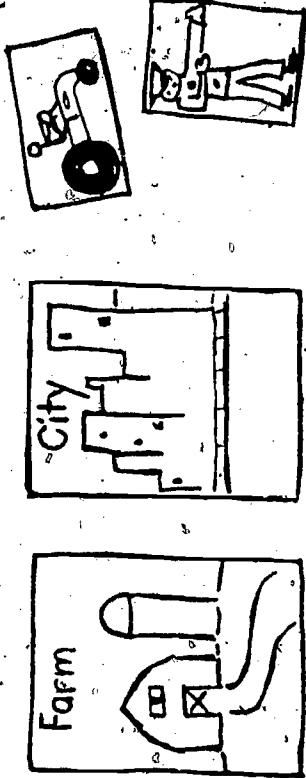


CONCEPT II-B: OBJECTS OF SIMILAR NATURE CAN BE GROUPED ACCORDING TO THEIR SIMILARITY

Game #26 Gathering: Cardboard; pictures of farm and city activities.

Making: Glue farm scene in box lid, city scene in bottom of box. Mount other pictures on cardboard.

Using: Child groups pictures as shown.

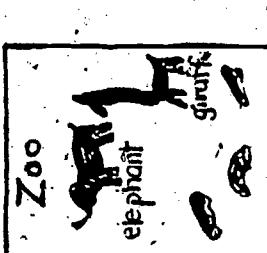
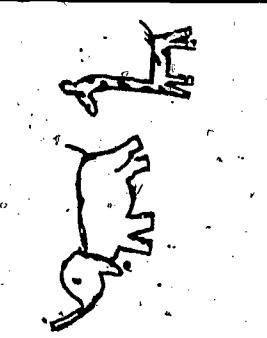
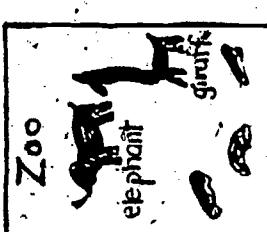
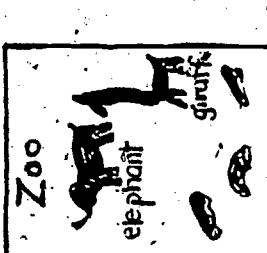
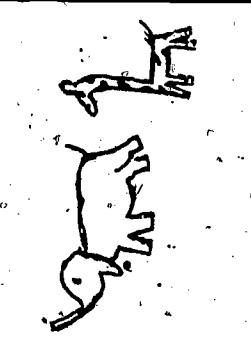


CONCEPT II-B: OBJECTS OF SIMILAR NATURE CAN BE GROUPED ACCORDING TO THEIR SIMILARITY

Game #26 Gathering: Cardboard; pictures of farm and city activities.

Making: Glue farm scene in box lid, city scene in bottom of box. Mount other pictures on cardboard.

Using: Child groups pictures as shown.

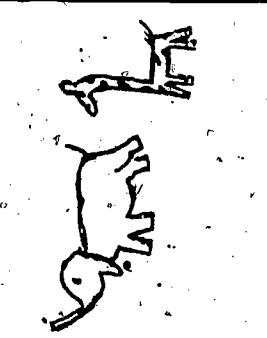
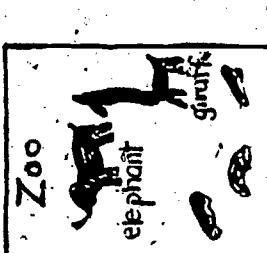
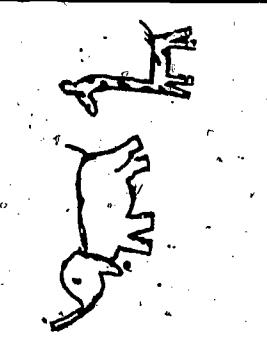
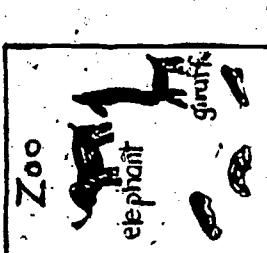
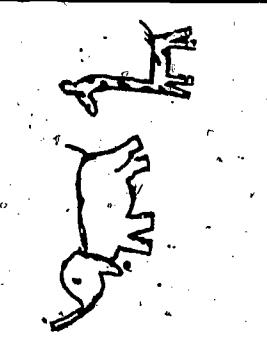
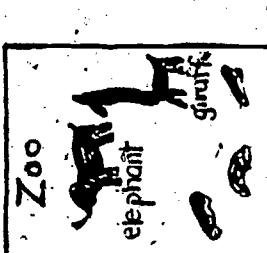
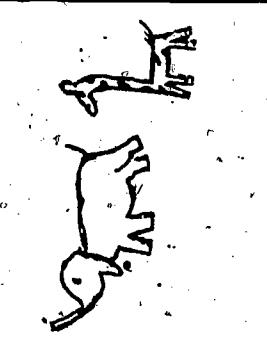
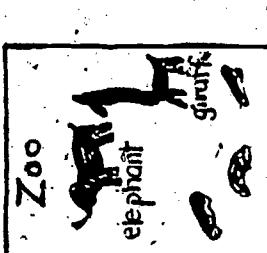
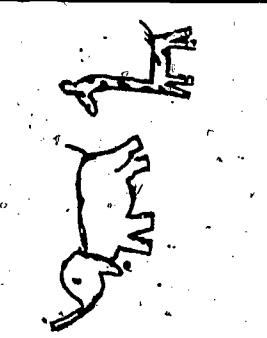
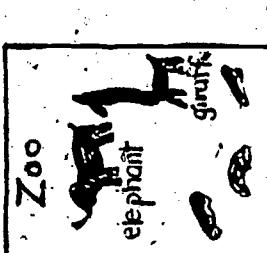
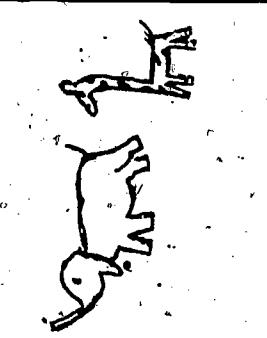
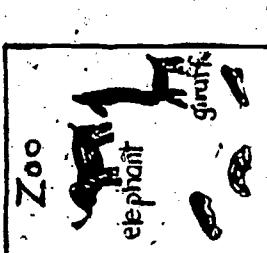
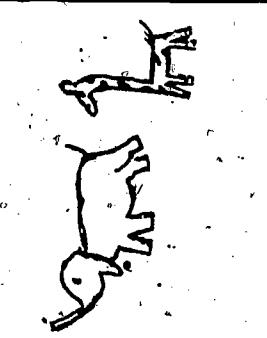
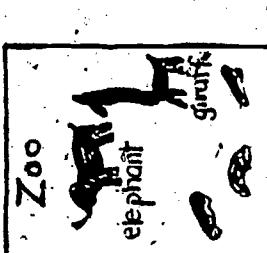
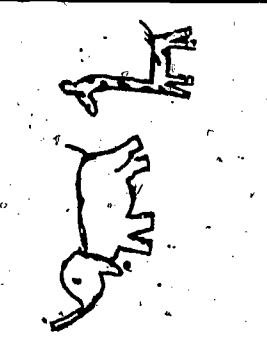
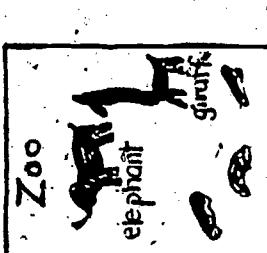
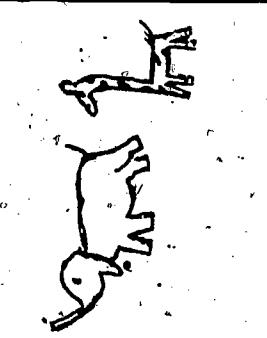
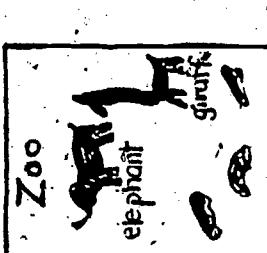
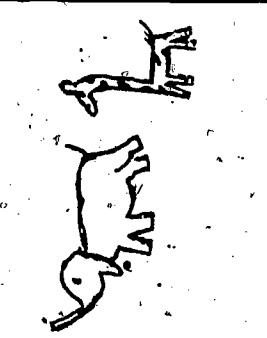
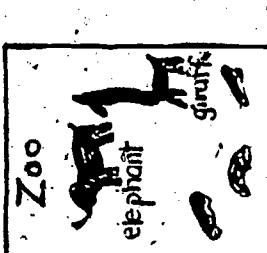
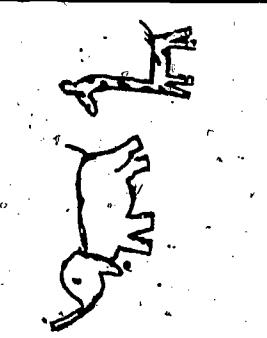
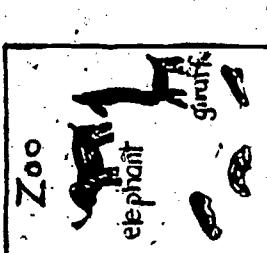
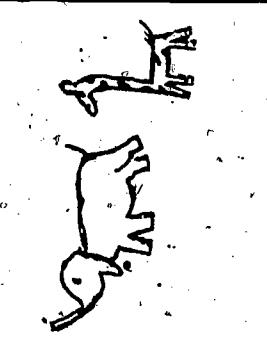
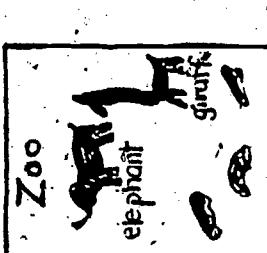
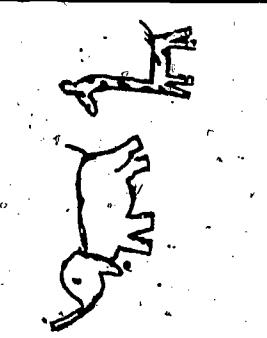
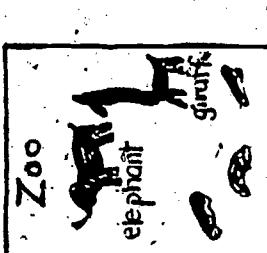
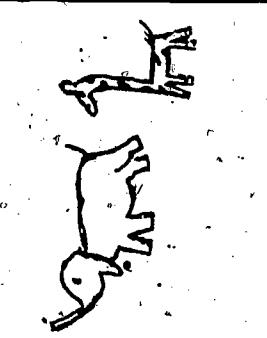
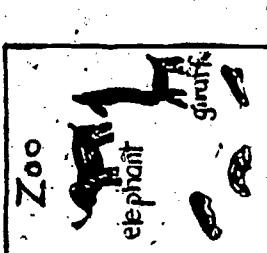
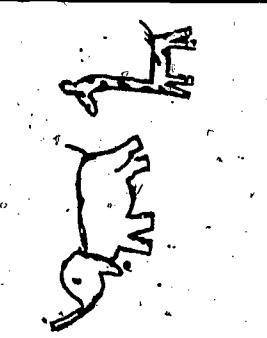
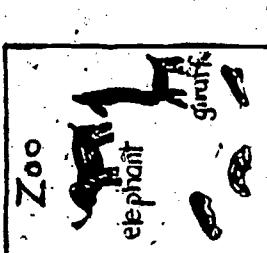
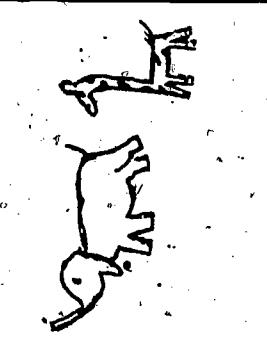
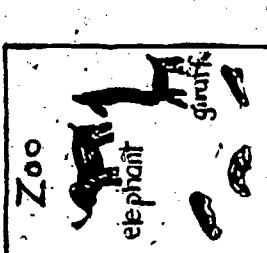
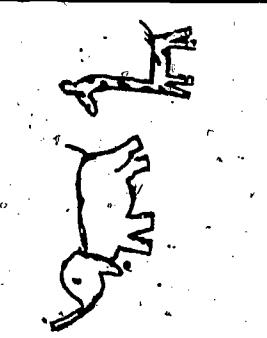
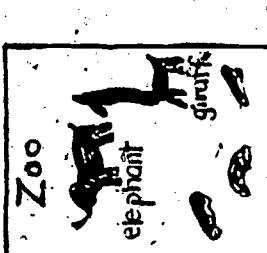
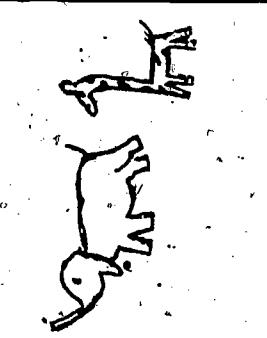
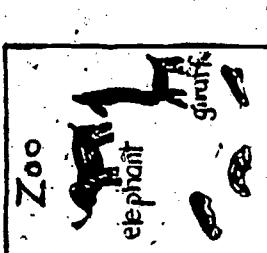
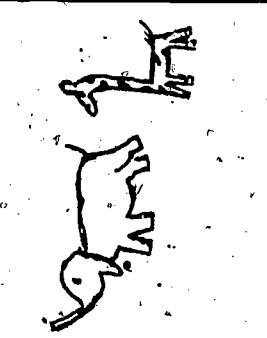
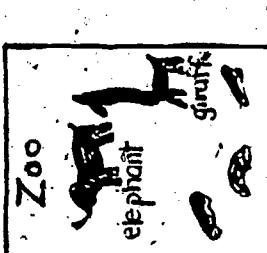
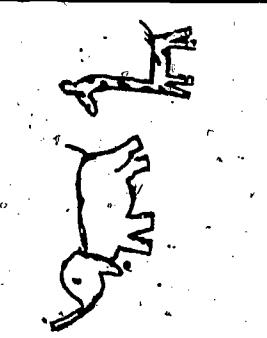
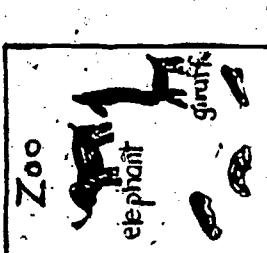
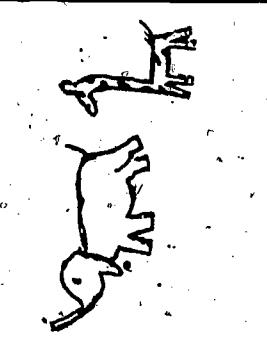
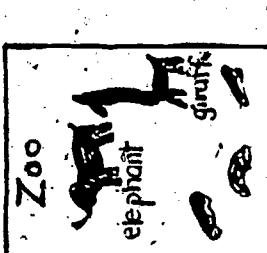
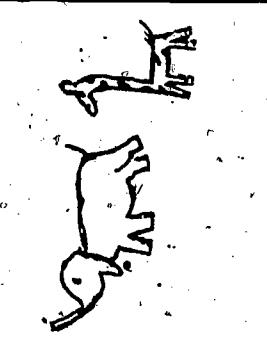
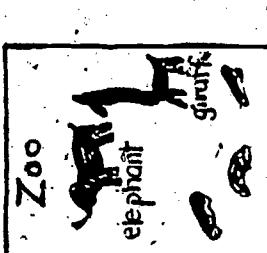
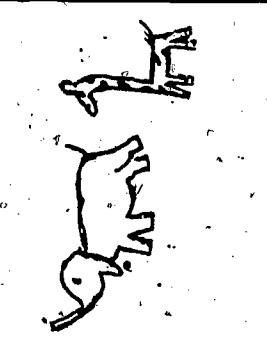
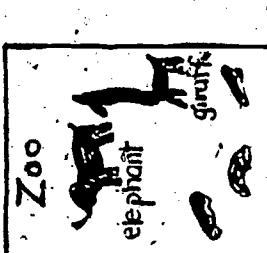
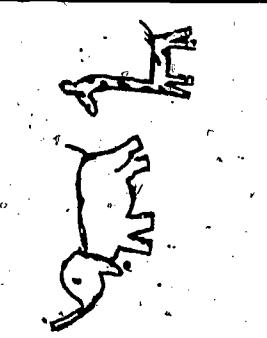
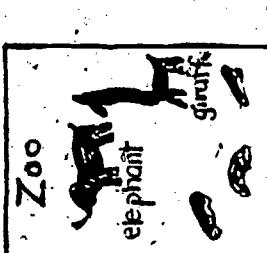
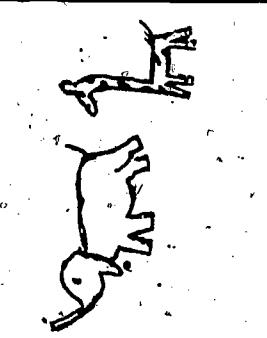
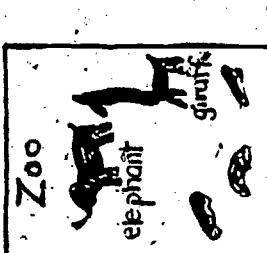
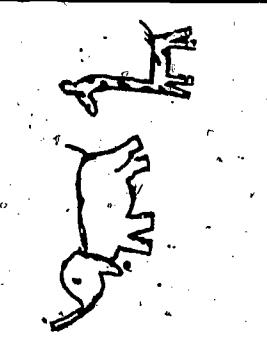
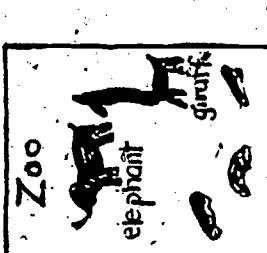
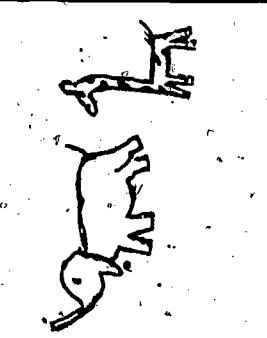
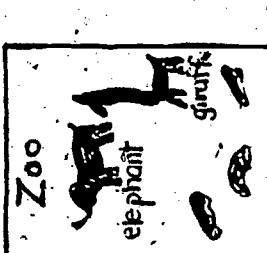
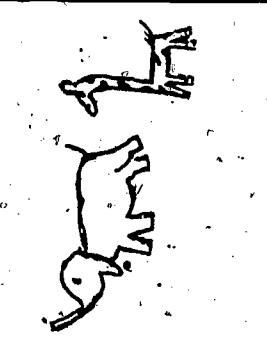
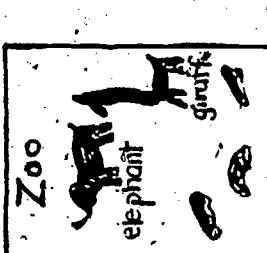
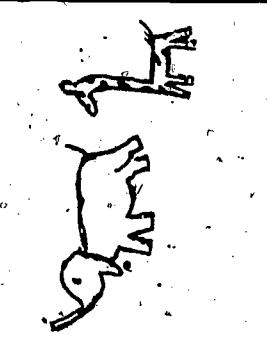
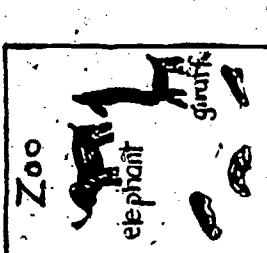
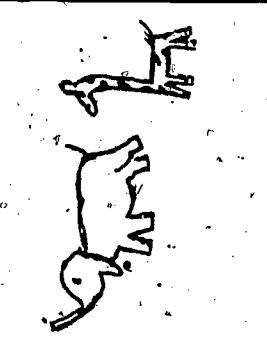
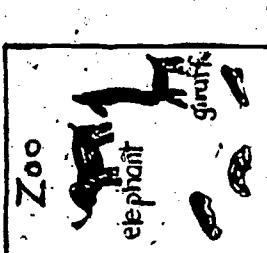
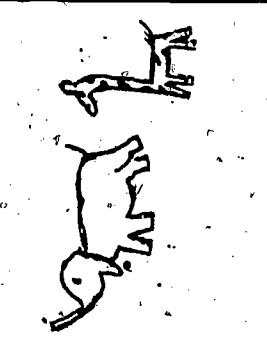
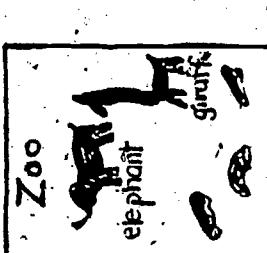
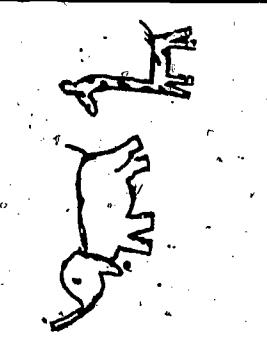
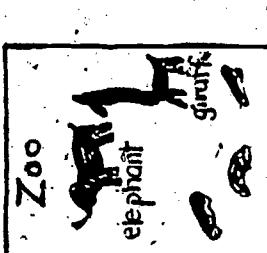
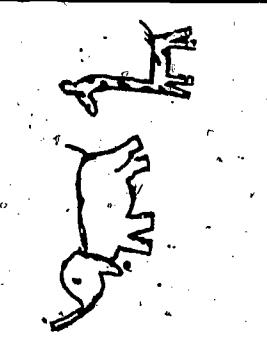
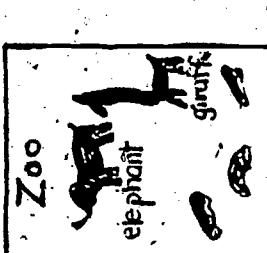
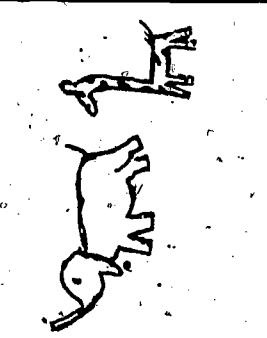
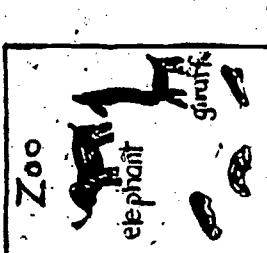
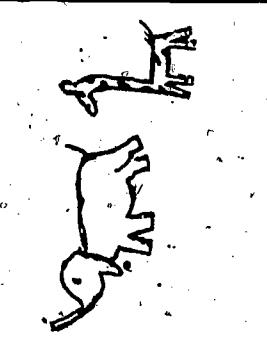
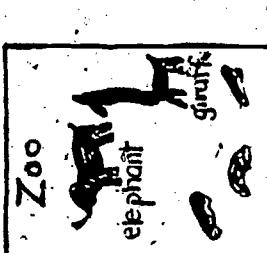
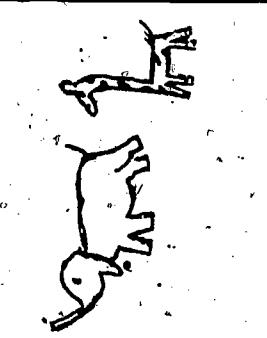
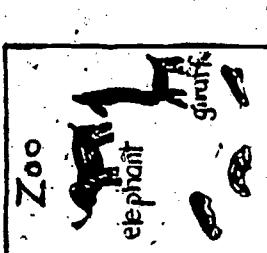
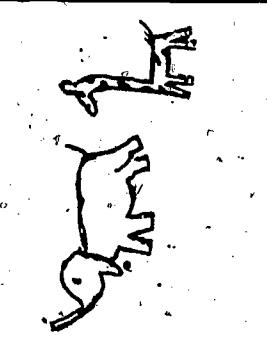
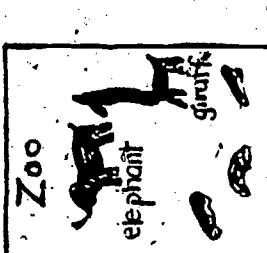
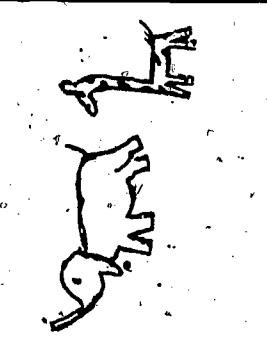
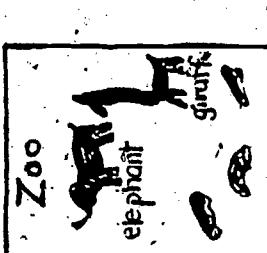
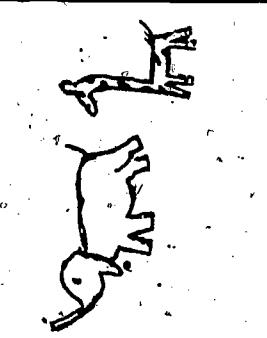
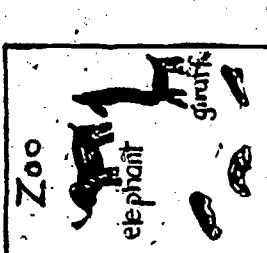
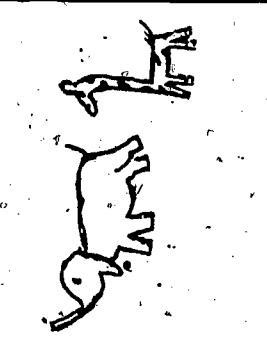
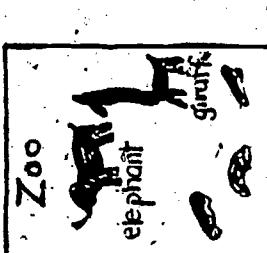
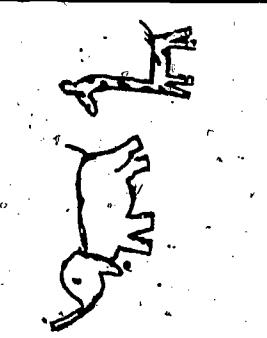
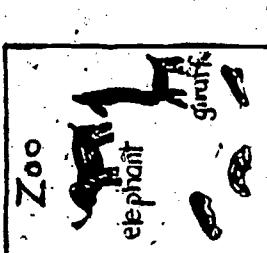
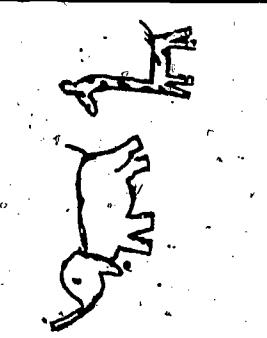
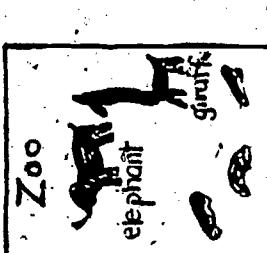
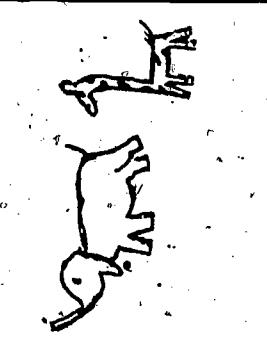
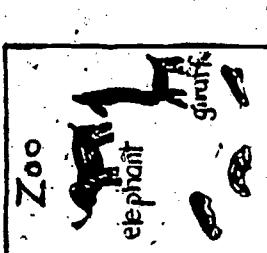
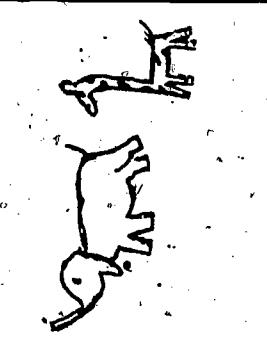
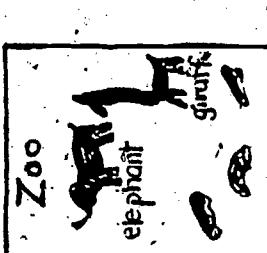
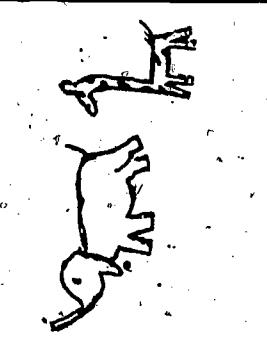
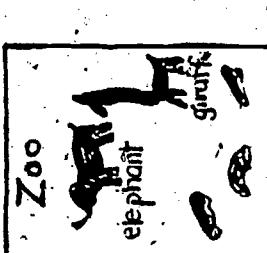
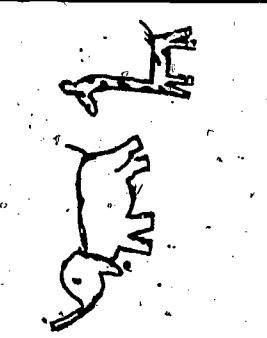
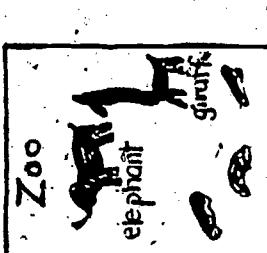
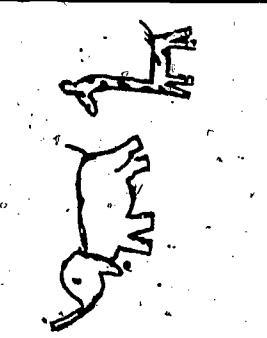
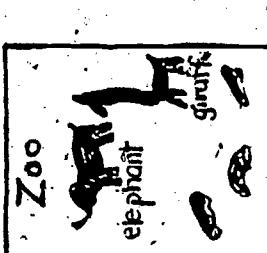
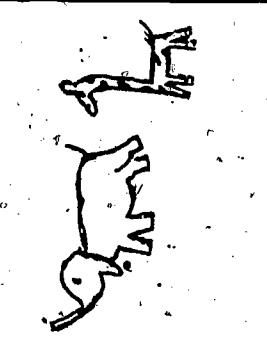
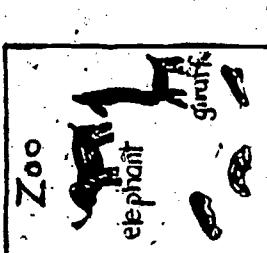
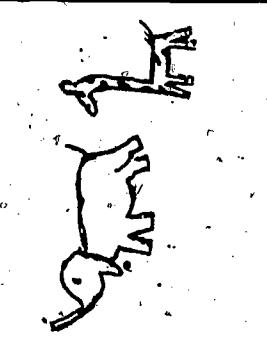
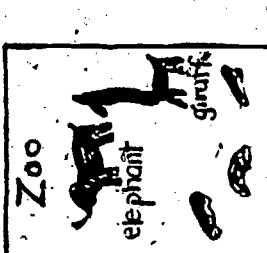
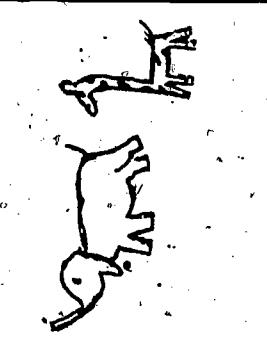
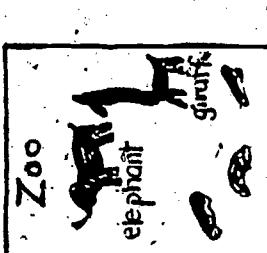
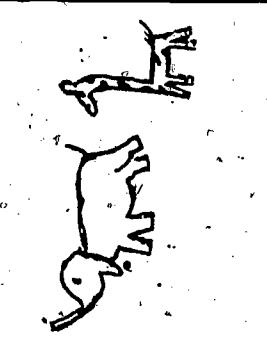
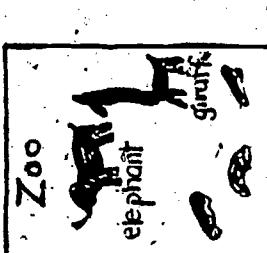
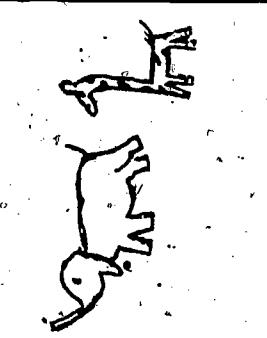
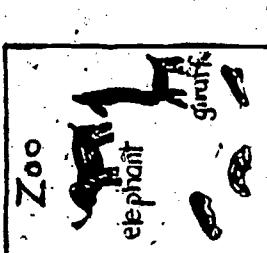
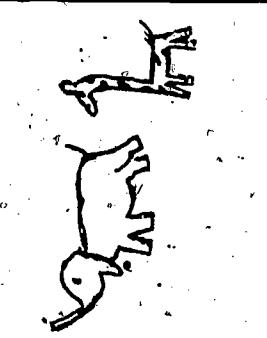
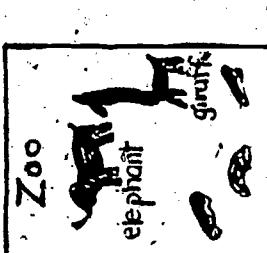
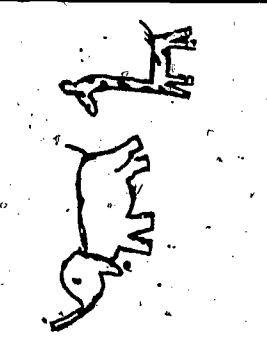
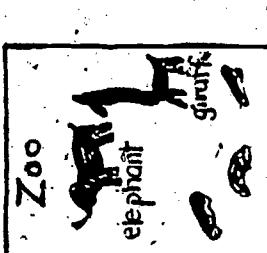
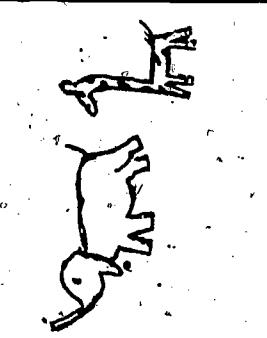
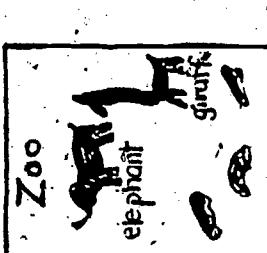
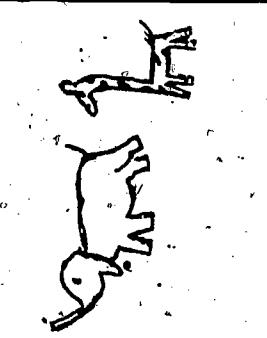
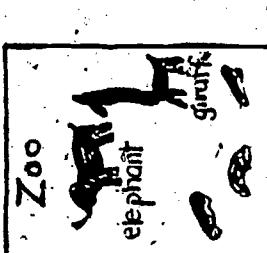
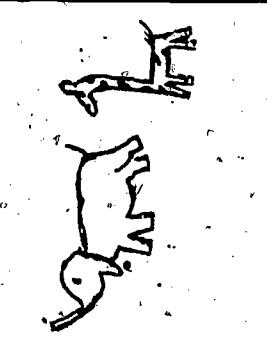
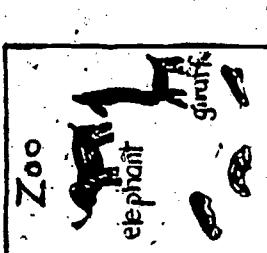
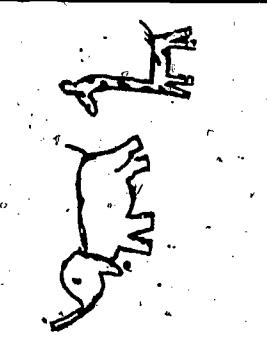
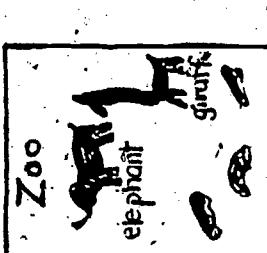
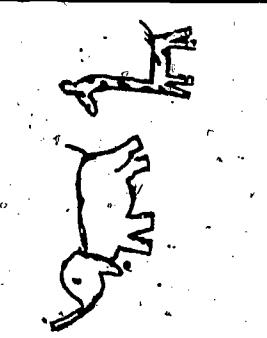
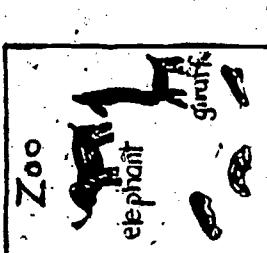
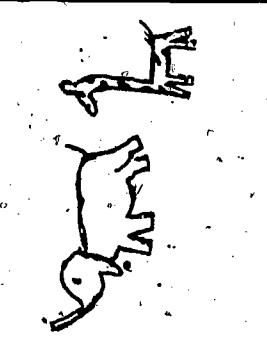
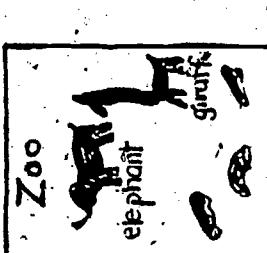
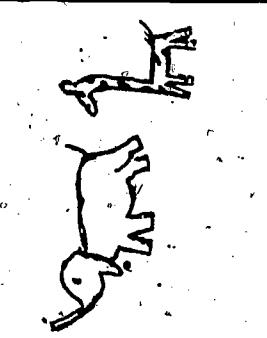
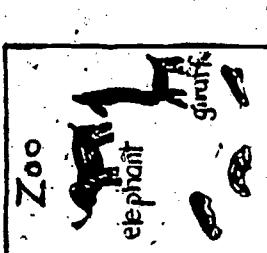
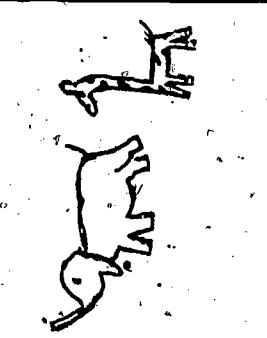
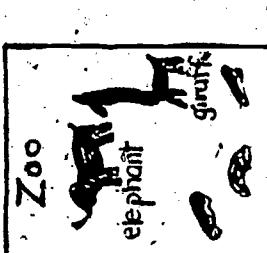
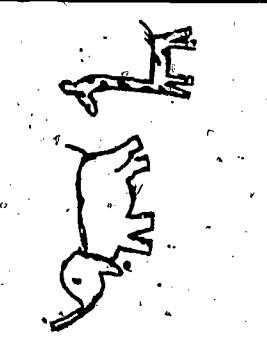
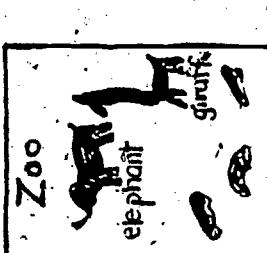
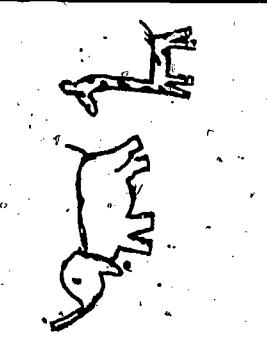
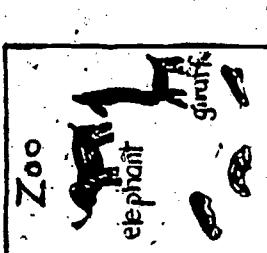
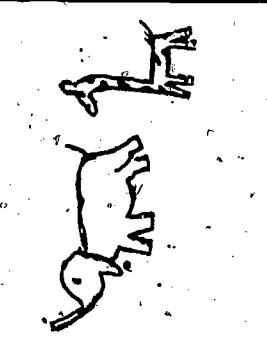
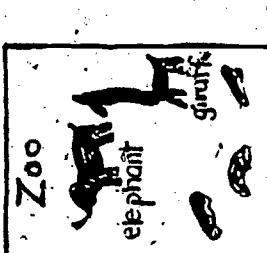
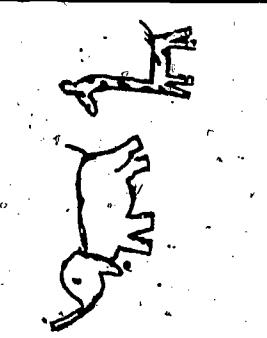
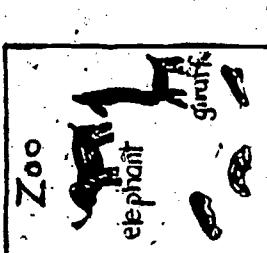
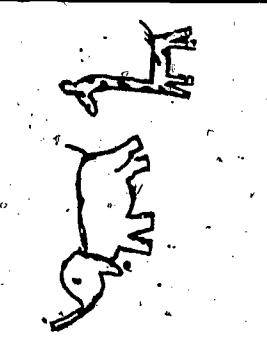
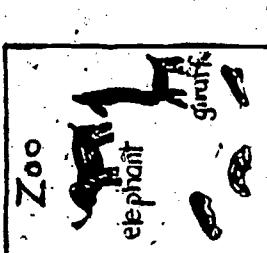
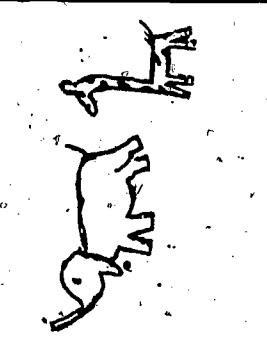
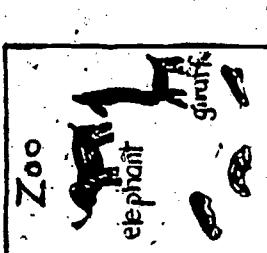
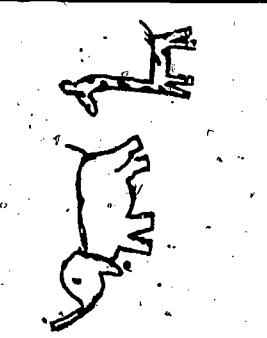
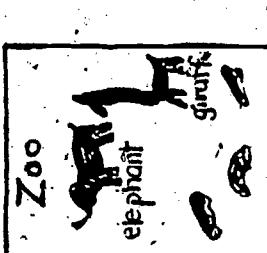
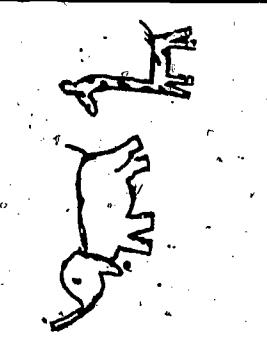
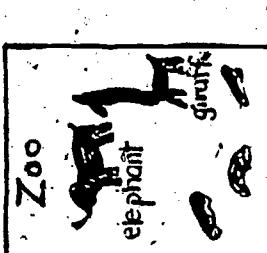
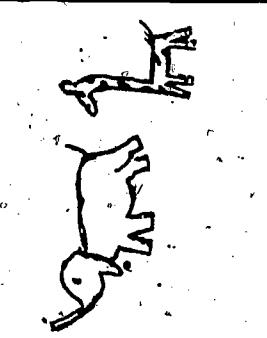
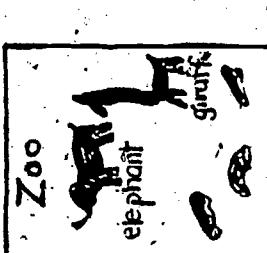
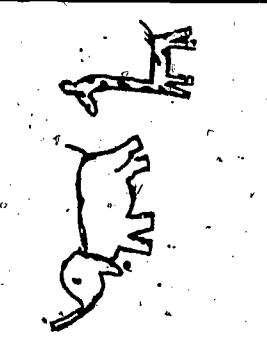
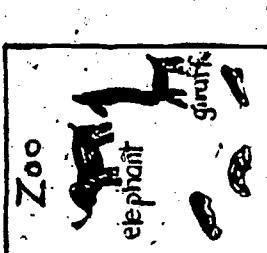
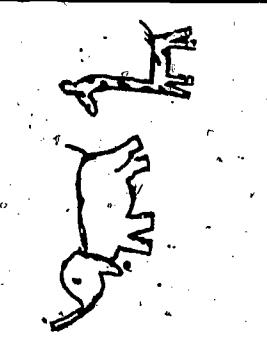
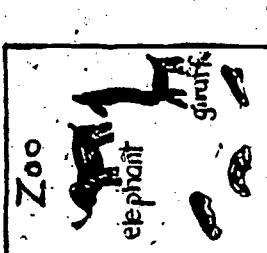
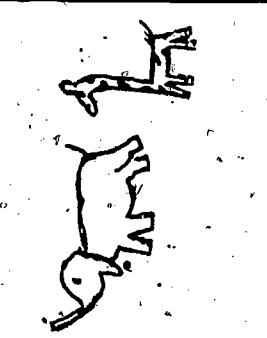
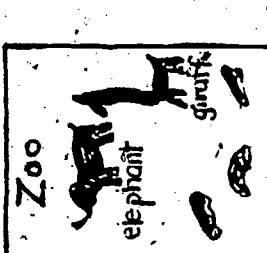
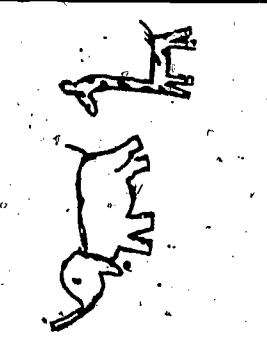
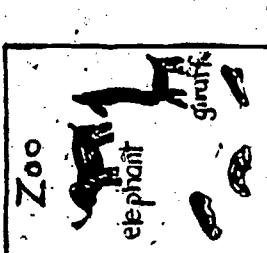
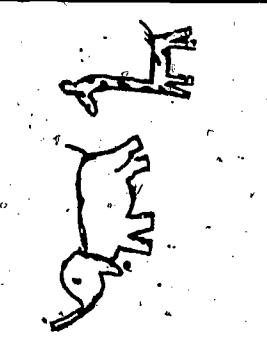
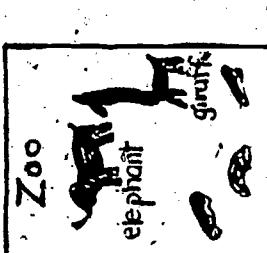
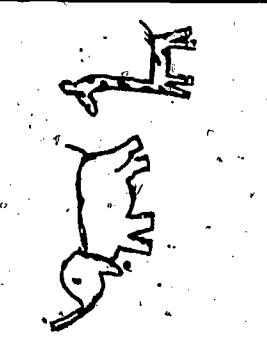
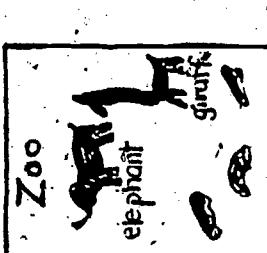
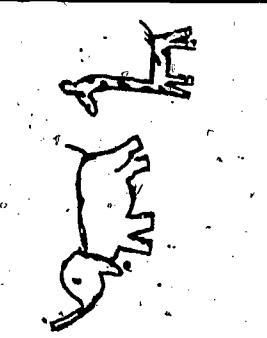
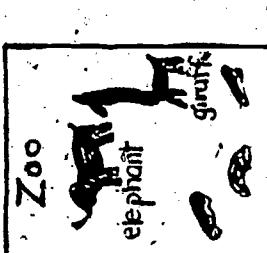
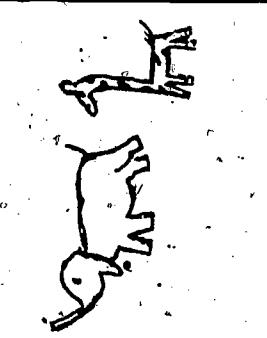
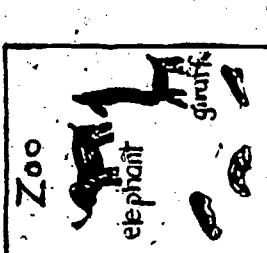
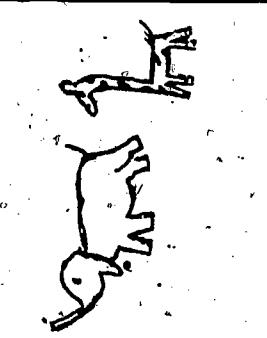
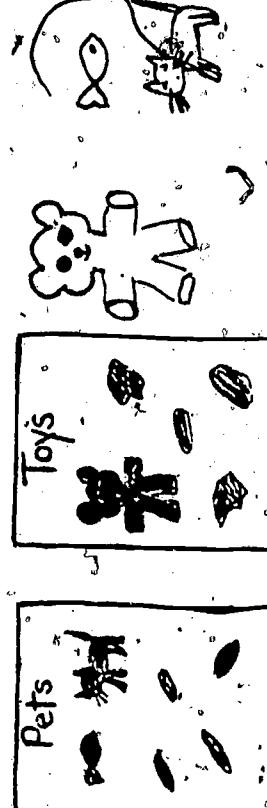


CONCEPT II-B: OBJECTS OF SIMILAR NATURE CAN BE GROUPED ACCORDING TO THEIR SIMILARITY

Game #28 Gathering: Cardboard; pictures of pets and of similar toy animals (e.g. real horse and stuffed horse, etc.).

Making: Back pictures with cardboard: Glue "shadows" of animals in box.

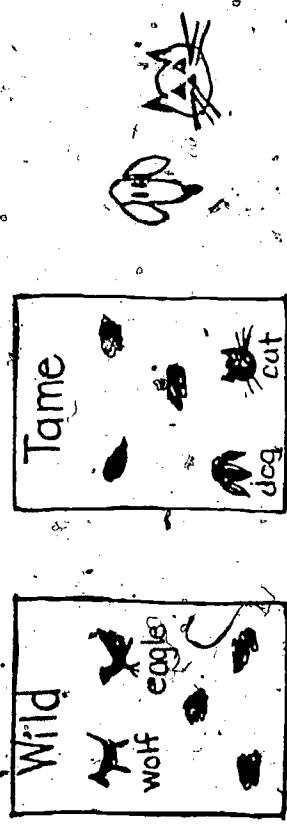
Using: Child groups pets and toys, matching pictures and "shadows".



CONCEPT II: OBJECTS CAN BE ORGANIZED BY THEIR IDENTITY

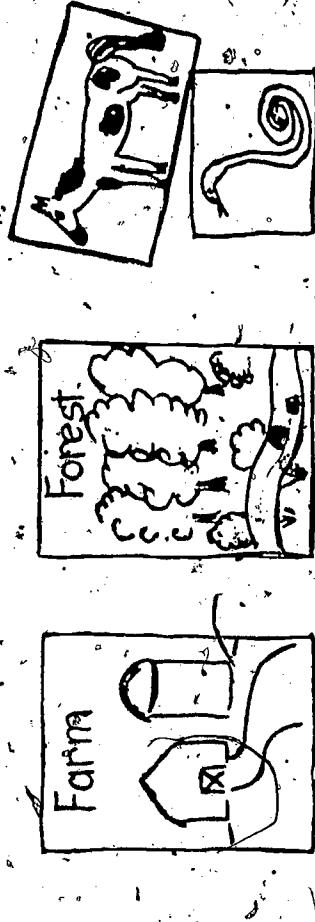
CONCEPT II-B: OBJECTS OF SIMILAR NATURE CAN BE GROUPED ACCORDING TO THEIR SIMILARITY

Game #29
Gathering: Cardboard; pictures of wild and tame animals.
Making: Back pictures with cardboard. Glue "shadows" of animals in box as shown. Write names of animals under "shadows".
Using: Child groups animals, matching pictures and "shadows".



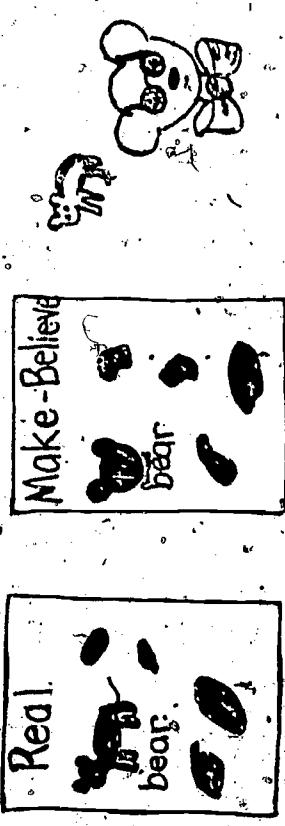
CONCEPT II-B: OBJECTS OF SIMILAR NATURE CAN BE GROUPED ACCORDING TO THEIR SIMILARITY

Game #30
Gathering: Cardboard; pictures of farm and forest animals.
Making: Glue picture of forest in lid and pictures of farm in bottom of box. Mount other pictures on cardboard.
Using: Child groups animals as shown.



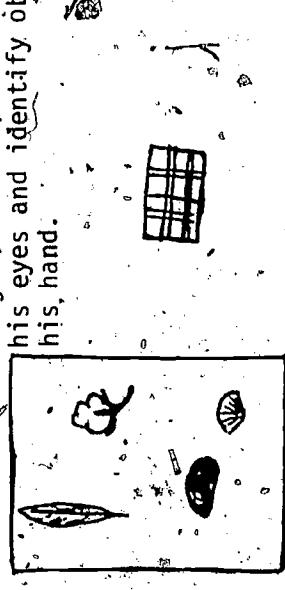
CONCEPT III-B: OBJECTS OF SIMILAR NATURE CAN BE GROUPED ACCORDING TO THEIR SIMILARITY

Game #31
Gathering: Cardboard; pictures of real animals and of make-believe animals.
Making: Back pictures with cardboard. Glue "shadows" in box.
Using: Child groups pictures, matching to "shadows".



CONCEPT III-B: OBJECTS OF SIMILAR NATURE CAN BE GROUPED ACCORDING TO THEIR SIMILARITY

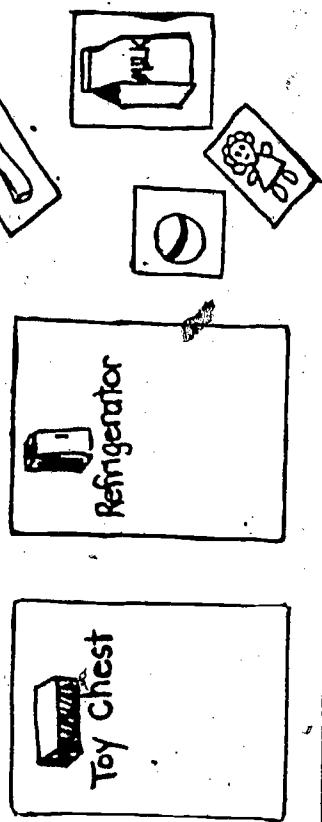
Game #32
Gathering: Objects of different textures: sandpaper, sponge, cotton, rock, wood, plastic, wool, nylon net, seed, sea shell, etc.
Making: Place objects in box.
Using: Child feels, weighs, & handles each object, then groups by similarity (i.e. shape, weight, or size). Child may then close his eyes and identify objects placed in his hand.



CONCEPT II: OBJECTS CAN BE ORGANIZED BY THEIR IDENTITY

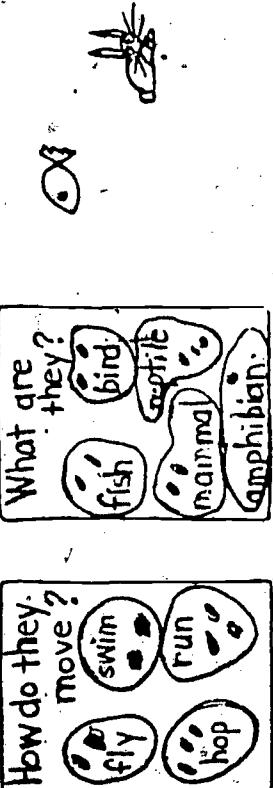
CONCEPT II-C: OBJECTS WITH SIMILAR USES CAN BE GROUPED BY THEIR PURPOSES

Game #33 Gathering: Cardboard; pictures of toys and refrigerated foods.
Making: Glue picture of toy chest in lid and picture of refrigerator in bottom of box. Mount pictures on cardboard.
Using: Child groups pictures as shown.



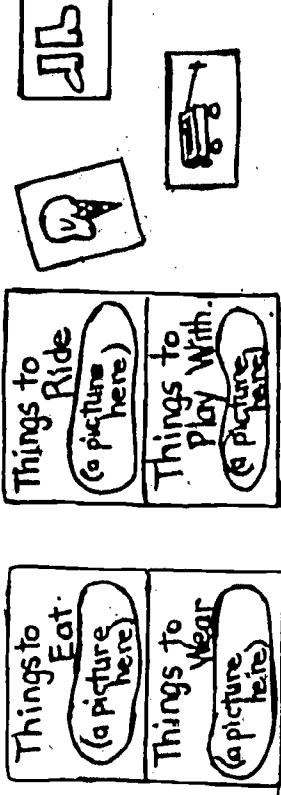
CONCEPT II-C: OBJECTS WITH SIMILAR USES CAN BE GROUPED BY THEIR PURPOSES

Game #35 (evaluation of CONCEPT II-C)
Gathering: Cardboard; pictures of animals.
Making: Back pictures with cardboard. Arrange "shadows" of animals as shown.
NOTE: "Shadows" of same animals are used in both lid and bottom of box.
Using: Child groups pictures and classifies each animal in 2 ways as shown.



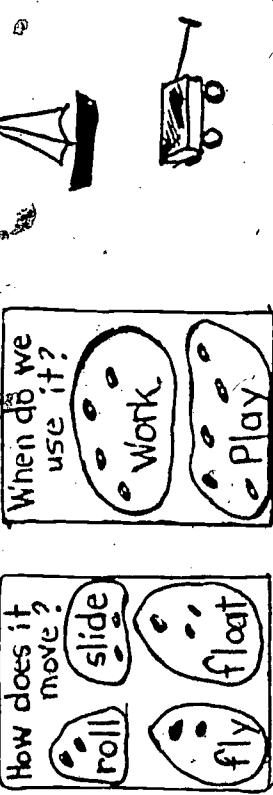
CONCEPT II-C: OBJECTS WITH SIMILAR USES CAN BE GROUPED BY THEIR PURPOSES

Game #34 Gathering: Cardboard; pictures of food, clothing, toys, and vehicles.
Making: Mount pictures on cardboard; divide box into 4 parts as shown; in each part of box, glue picture of a child eating, dressing, playing, riding.
Using: Child groups pictures as shown.



CONCEPT II-C: OBJECTS WITH SIMILAR USES CAN BE GROUPED BY THEIR PURPOSES

Game #36 (evaluation of CONCEPT II)
Gathering: Cardboard; pictures of vehicles.
Making: Back pictures with cardboard. Arrange "shadows" of vehicles as shown.
NOTE: "Shadows" of same vehicles are used in both lid and bottom of box.
Using: Child groups pictures and classifies each vehicle in 2 ways as shown.



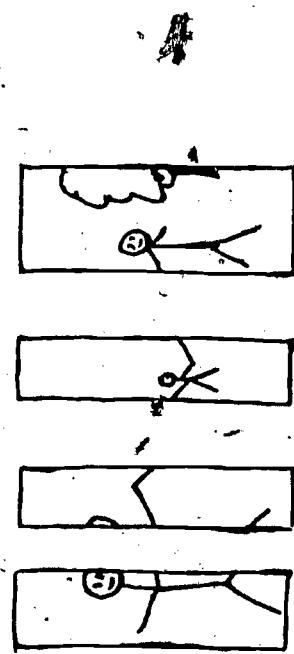
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CONCEPT III: OBJECTS CAN BE ORGANIZED ACCORDING TO THEIR RELATIONSHIPS

CONCEPT III-A: SEPARATE PARTS CAN BE ARRANGED TO FORM A MEANINGFUL WHOLE

Game #37

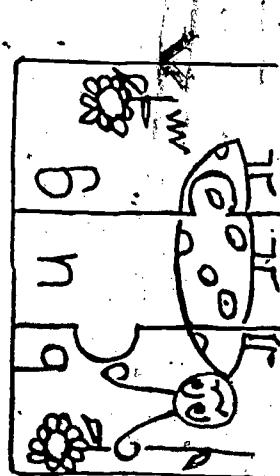
Gathering: Cardboard; magazine pictures (duplicate pictures if possible).
Making: Mount pictures on cardboard. Cut each into 4 or 5 strips. (If duplicate picture is found, glue inside box, uncut.)
Using: Child assembles pictures. (If with duplicate picture, may assemble on top or beside it.)



CONCEPT III-A: SEPARATE PARTS CAN BE ARRANGED TO FORM A MEANINGFUL WHOLE

Game #39

Gathering: Cardboard; felt-tip pens.
Making: Draw picture of an object with a 3 or 4-letter name. Cut between each letter of word, leaving tabs and notches as shown.
Using: Child assembles parts to form picture and word.

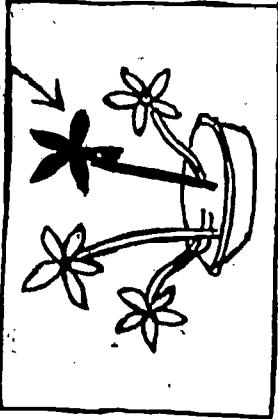


CONCEPT III-A: SEPARATE PARTS CAN BE ARRANGED TO FORM A MEANINGFUL WHOLE

Game #38

Gathering: Cardboard; felt-tip pens or magazine pictures. Draw or glue pictures on cardboard. Cut 1 object from each picture to be "missing part". Place several of these in 1 box.
Using: Child places "missing parts" in appropriate pictures.

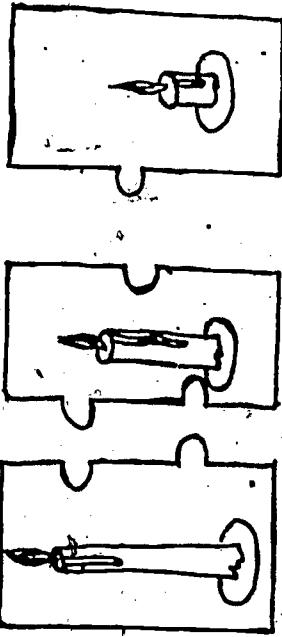
(Place for missing part)



CONCEPT III-A: SEPARATE PARTS CAN BE ARRANGED TO FORM A MEANINGFUL WHOLE

Game #40

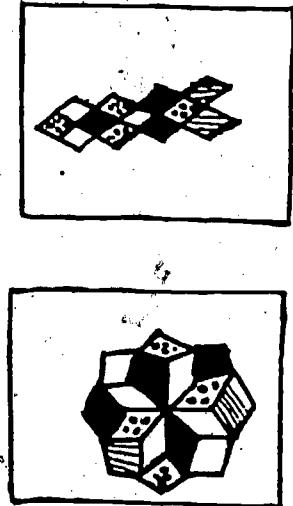
Gathering: Cardboard; felt-tip pens or magazine pictures showing 3 sequential steps of an event.
Making: Draw or glue pictures on cardboard. Cut pictures apart, leaving tabs and notches as shown.
Using: Child assembles pictures in sequential order.



CONCEPT III: OBJECTS CAN BE ORGANIZED ACCORDING TO THEIR RELATIONSHIPS

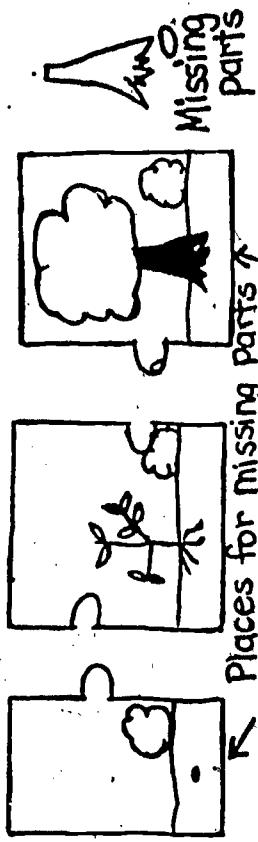
CONCEPT III-A: SEPARATE PARTS CAN BE ARRANGED ACCORDING TO THEIR RELATIONSHIPS

- Game #41 Gathering: Parquet blocks; felt-tip pens or construction paper.
- Making: In box draw and color or glue patterns to be made with blocks as shown. Colors in designs should correspond to colors of blocks.
- Using: Child places blocks on pattern.



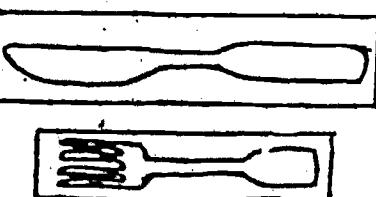
CONCEPT III-A: SEPARATE PARTS CAN BE ARRANGED TO FORM A MEANINGFUL WHOLE

- Game #42 Gathering: Cardboard; felt-tip pens or magazine pictures to show 3 sequential steps of an event.
- Making: Draw or glue pictures on cardboard. Cut pictures apart, leaving tabs and notches as shown. Cut 1 or 2 objects from the puzzle for "missing parts".
- Using: Child assembles pictures in sequential order and supplies missing parts.



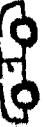
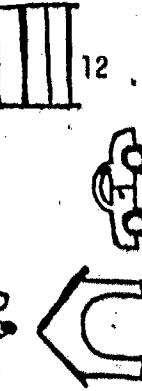
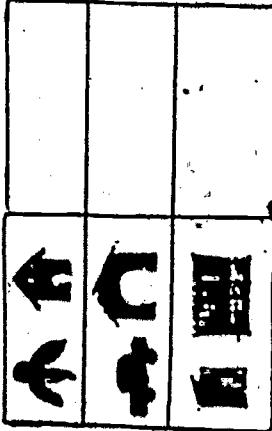
CONCEPT III-B: OBJECTS CAN BE USED TOGETHER TO PERFORM A MEANINGFUL PURPOSE

- Game #43 Gathering: Cardboard; pictures of objects used together (eg. knife-fork, etc.).
- Making: Mount pictures on cardboard.
- Using: Child groups objects customarily used together.



CONCEPT III-B: OBJECTS CAN BE USED TOGETHER TO PERFORM A MEANINGFUL PURPOSE

- Game #44 Gathering: Cardboard; pictures of people, animals, or things; other pictures showing relationship to these pictures (e.g. car-garage, queen-castle, etc.).
- Making: Back pictures with cardboard. Glue "shadows" of each in box as shown.
- Using: Child places pictures on "shadows" to indicate relationships.

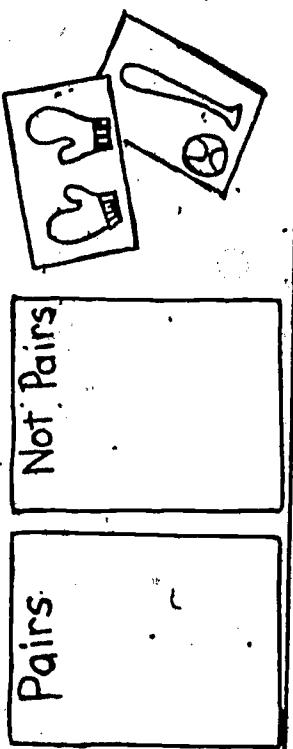


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CONCEPT III: OBJECTS CAN BE ORGANIZED ACCORDING TO THEIR RELATIONSHIPS

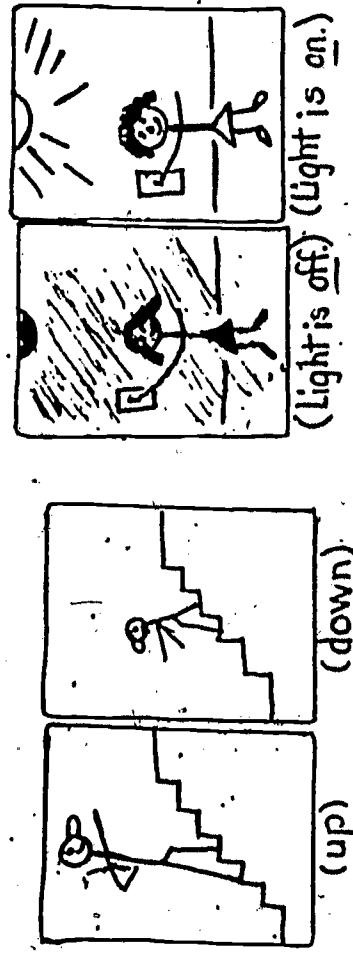
CONCEPT III-B: OBJECTS CAN BE USED TOGETHER TO PERFORM A MEANINGFUL PURPOSE

Game #45 Gathering: Cardboard; pictures of pairs of objects (e.g. boots, gloves, etc.); pictures of objects that are not usually pairs.
Making: Mount pictures on cardboard. Label lid of box "Pairs"; glue in an example picture. Label bottom of box "Not Pairs"; glue in an example picture.
Using: Child sorts pictures.



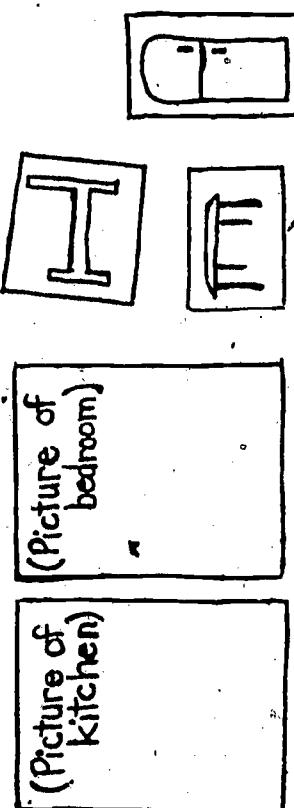
CONCEPT III-B: OBJECTS CAN BE USED TOGETHER TO PERFORM A MEANINGFUL PURPOSE

Game #46 Gathering: Cardboard; felt-tip pens or pictures of opposite situations, as shown.
Making: Draw or glue Pictures on cardboard.
Using: Child sorts cards of opposites as shown.



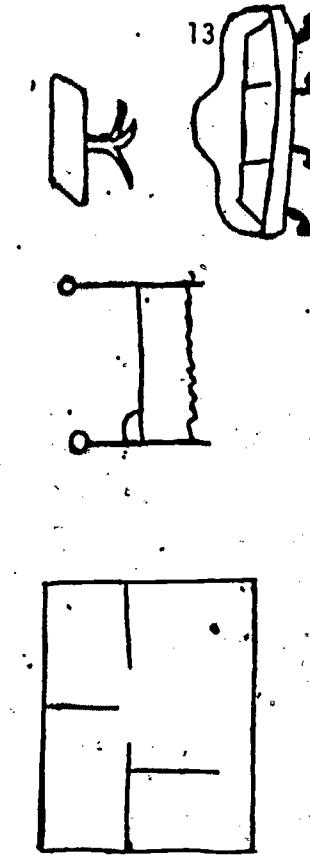
CONCEPT III-B: OBJECTS CAN BE USED TOGETHER TO PERFORM A MEANINGFUL PURPOSE

Game #47 (evaluation of CONCEPT III-B)
Gathering: Cardboard; pictures of 2 rooms in a house; objects appropriate to those rooms (pictures or small doll furniture).
Making: Glue picture of 1 room in lid, other in bottom of box. Mount other pictures on cardboard.
Using: Child places furniture in appropriate rooms.



CONCEPT III-C: THE SAME OBJECTS CAN BE ARRANGED TO OCCUPY SPACE DIFFERENTLY

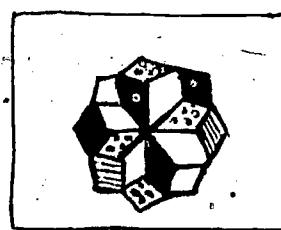
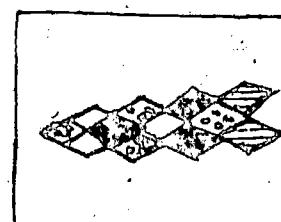
Game #48 Gathering: Cardboard partitions for inside of box; small doll furniture.
Making: Take rooms using cardboard partitions. Place furniture randomly in box.
Using: Child rearranges furniture, dividing space in different ways.



CONCEPT III: OBJECTS CAN BE ORGANIZED ACCORDING TO THEIR RELATIONSHIPS

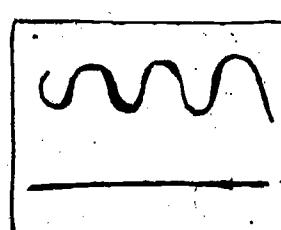
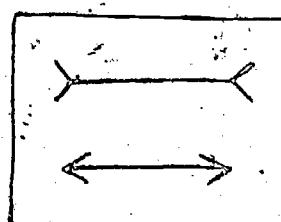
CONCEPT III-C: THE SAME OBJECTS CAN BE ARRANGED TO OCCUPY SPACE DIFFERENTLY

- Game #49 (See Game #41)
 Gathering: Parquet blocks; felt-tip pens or colored construction paper.
 Making: In box draw and color or glue patterns to be made with blocks. Colors in designs should correspond to colors of blocks.
 Using: Child reconstructs designs with blocks outside the box.



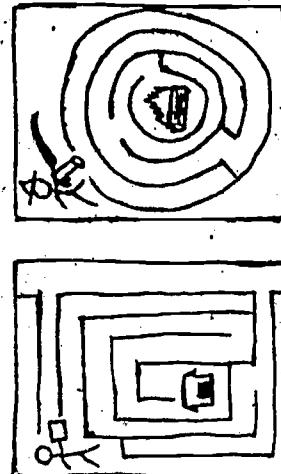
31 CONCEPT III-C: THE SAME OBJECTS CAN BE ARRANGED TO OCCUPY SPACE DIFFERENTLY

- Game #51
 Gathering: Felt-tip pens; long pipe cleaners.
 Making: Draw lines in lid and bottom of box.
 Place pipe cleaners in box.
 Using: Child "walks" with fingers along lines to determine which is longer. Then he measures with pipe cleaner to verify.



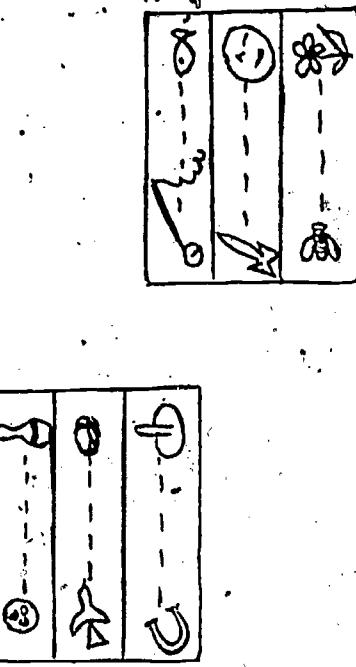
CONCEPT III-C: THE SAME OBJECTS CAN BE ARRANGED TO OCCUPY SPACE DIFFERENTLY

- Game #50
 Gathering: Felt-tip pens; small pictures of mailman-house, of fireman-flame, etc.
 Making: Draw maze in lid and bottom of box as shown. Glue picture of person at starting point of maze and his destination in the center.
 Using: Child traces with finger to find the way to the destination.



CONCEPT III-C: THE SAME OBJECTS CAN BE ARRANGED TO OCCUPY SPACE DIFFERENTLY

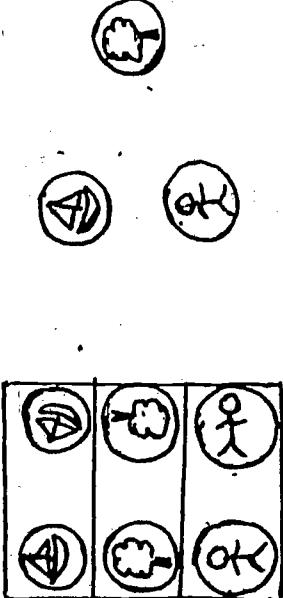
- Game #52
 Gathering: Felt-tip pens.
 Making: Draw objects in box showing movement from left to right as shown.
 Using: Child traces from left to right with finger.



CONCEPT III: OBJECTS CAN BE ORGANIZED ACCORDING TO THEIR RELATIONSHIPS

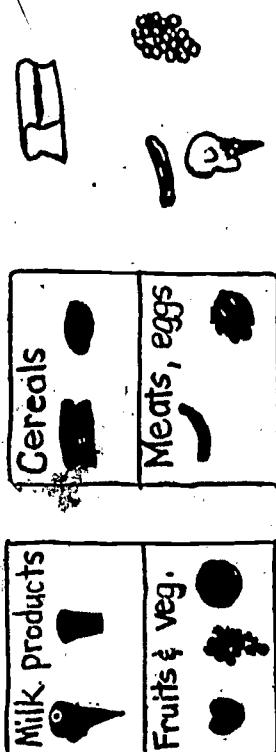
CONCEPT III-C: THE SAME OBJECTS CAN BE ARRANGED TO OCCUPY SPACE DIFFERENTLY

- Game #53 Gathering: Cardboard; 3 identical pictures from magazines or wallpaper books. Glue 1 picture in upright position; glue another picture beside it "tilted" a different way; back third picture with cardboard. Child places third picture over "tilted" picture, making it look "right".



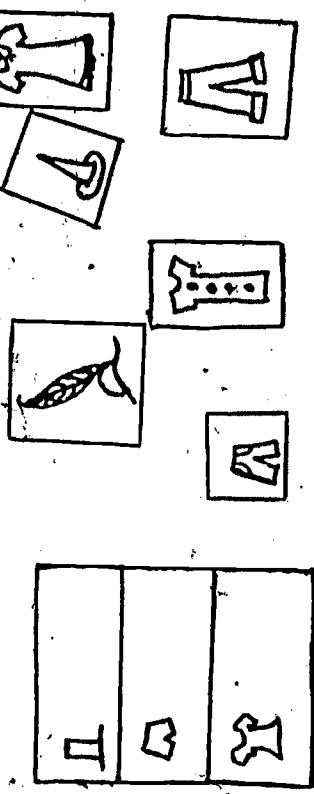
CONCEPT III-D: OBJECTS, BECAUSE OF SIMILAR NATURE, BELONG TOGETHER

- Game #55 Gathering: Cardboard; several pictures of the "basic 4" (milk products, meat, cereals, fruits and vegetables). Glue "shadows" of food in box; back pictures of food with cardboard. Child matches food to "shadows".



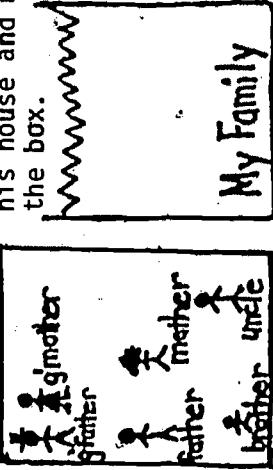
CONCEPT III-D: OBJECTS, BECAUSE OF SIMILAR NATURE, BELONG TOGETHER

- Game #54 Gathering: Cardboard; pictures of similar articles of clothing, 3 in each category (e.g. pants, hats, shoes, etc.). Glue 1 picture of each category in box; mount pictures on cardboard. Child groups pictures.



CONCEPT III-D: OBJECTS, BECAUSE OF SIMILAR NATURE, BELONG TOGETHER

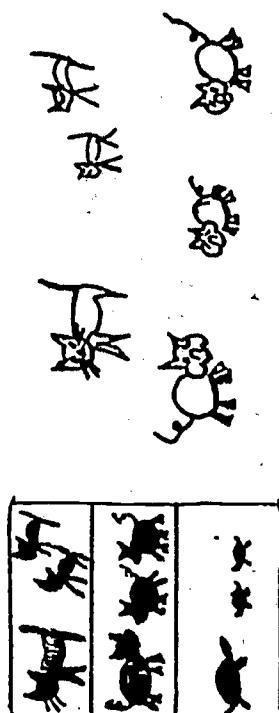
- Game #54 Gathering: Cardboard; pictures of family members (e.g. mother, grandfather, aunt, etc.). Be sure to include pictures of brothers and sisters of different age levels. Place "shadows" in lid of box. Write names of family members below "shadows". Child matches family members to "shadows".
- NOTE: He may choose the people who live at his house and make his family in bottom of the box.



CONCEPT III: OBJECTS CAN BE ORGANIZED ACCORDING TO THEIR RELATIONSHIPS

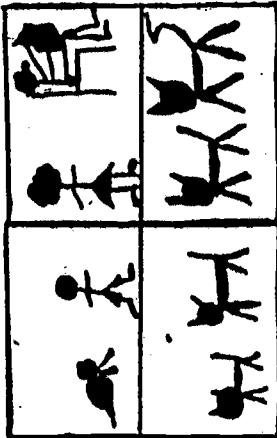
CONCEPT III-D: OBJECTS, BECAUSE OF SIMILAR NATURE, BELONG TOGETHER AND THEREFORE FORM A RELATIONSHIP

Game #57 Gathering: Cardboard; pictures of animal babies and their mothers.
Making: Glue "shadows" of mothers and babies together in box as shown; back pictures with cardboard.
Using: Child sorts pictures into family groups and places them on "shadows".



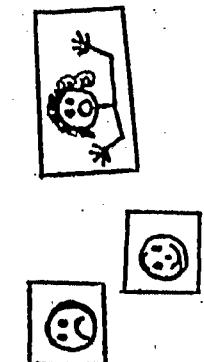
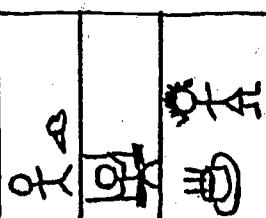
CONCEPT III-D: OBJECTS, BECAUSE OF SIMILAR NATURE, BELONG TOGETHER AND THEREFORE FORM A RELATIONSHIP

Game #58 Gathering: Cardboard; pictures of family members, animals and people.
Making: Place "shadows" in box, arranging in sequence from youngest to oldest; back pictures with cardboard.
Using: Child places pictures into appropriate family groups and places them on "shadows".



CONCEPT III-E: PARTICULAR ACTIONS EVOKE PREDICTABLE, OBSERVABLE EFFECTS

Game #59 Gathering: Cardboard; pictures displaying various emotions (e.g. smiling, crying, etc.); pictures indicating cause of emotion (e.g. child falling down, etc.).
Making: Glue pictures of causes of emotions in box; back pictures with cardboard of children displaying emotions.
Using: Child sorts pictures as shown.



CONCEPT III-E: PARTICULAR ACTIONS EVOKE PREDICTABLE, OBSERVABLE EFFECTS

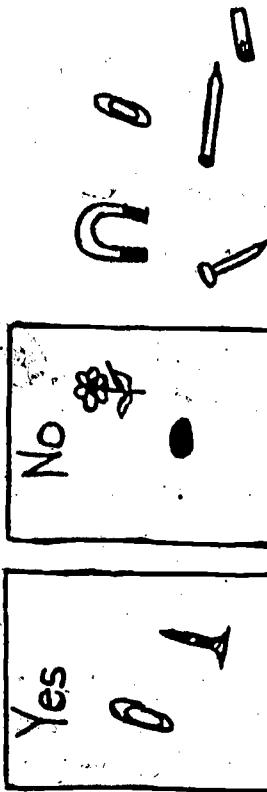
Game #60 Gathering: Notepaper box with acetate lid; tiny pieces of pillow foam; picture of snow scene.
Making: Glue picture in bottom of box; place pillow in box; tape lid on.
Using: Child rubs hand vigorously across box top and observes effect of static electricity on pillow foam.



CONCEPT III: OBJECTS CAN BE ORGANIZED ACCORDING TO THEIR RELATIONSHIPS

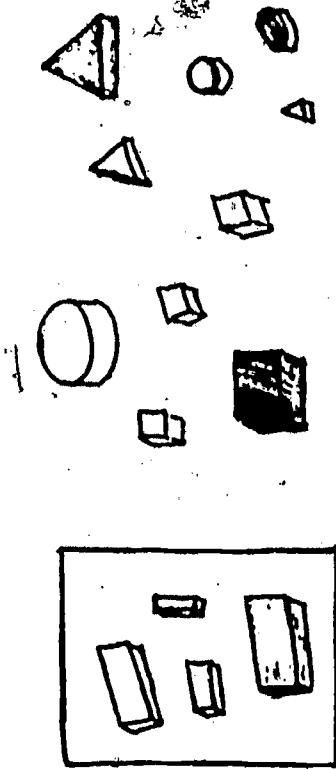
CONCEPT III-E: PARTICULAR ACTIONS EVOKE PREDICTABLE, OBSERVABLE EFFECTS

- Game #61 (evaluation of CONCEPT III-E)
 Gathering: Magnets; small objects (e.g. paperclips, screws, eraser, pencil, etc.).
 Making: Place magnets and objects in box. Label lid of box "Yes", bottom of box "No".
 Using: Child experiments with magnets and places objects the magnets pick up in "Yes", objects magnets do not pick up in "No".



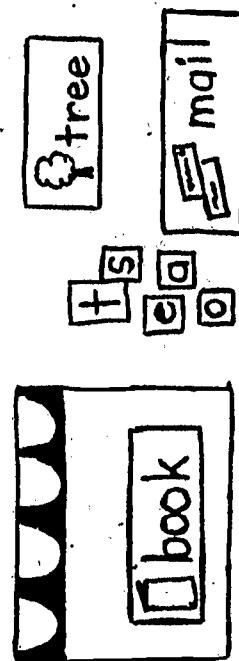
CONCEPT III: OBJECTS CAN BE ORGANIZED ACCORDING TO THEIR RELATIONSHIPS

- Game #62 (evaluation of CONCEPT III)
 Gathering: Blocks of various shapes, colors, and sizes.
 Making: Place blocks in box.
 Using: Child sorts blocks by shape, then by color, and finally by size.



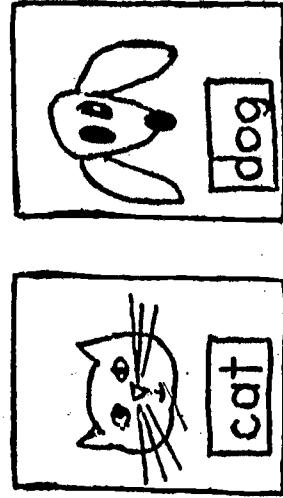
ANOTHER GAME YOU MAY WISH TO MAKE

- Game #63
 Gathering: Cardboard; 9"x3"; cardboard squares, 2"; pictures.
 Making: Write letters on cardboard squares; write words on 9"x3" cards and glue a picture on each as shown.
 Using: Child chooses a word-card, then matches letter squares to the word.



ANOTHER GAME YOU MAY WISH TO MAKE

- Game #64
 Gathering: Cardboard; pictures of a dog and a cat; acetate; crayon; paper towel.
 Making: Glue pictures in box, writing names as shown.
 Using: Child matches word-card with his crayon. Child rubs acetate clean.



YOU MAY WANT TO READ:

- Bloom, Benjamin S., Hastings, J. Thomas, & Madaus, George F. HANDBOOK ON FORMATIVE AND SUMMATIVE EVALUATION OF STUDENT LEARNING. New York: McGraw-Hill Book Co., 1971.
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GAMES GRAFFITI: Language Arts Games to Make For Young Children

by

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Sample

Game :

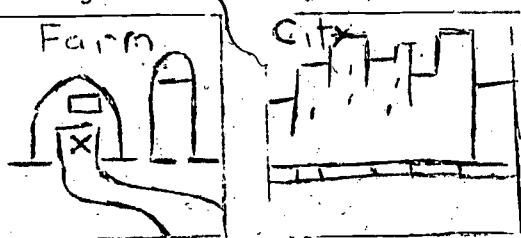
CONCEPT II-B: OBJECTS OF SIMILAR NATURE CAN BE GROUPED ACCORDING TO THEIR SIMILARITY

Game #26

Gathering: Cardboard; pictures of farm and city activities, animals, vehicles, buildings, etc.

Making: Glue farm scene in box lid, city scene in bottom of box. Mount other pictures on cardboard.

Using: Child groups pictures as shown.



A book of detailed directions for making 64 Language Arts games plus guidelines for developing hundreds of other games is available. All games use materials and items found around the house or in the classroom. The authors are available for workshops and in-service sessions for instruction and participation in construction of the games. The book may be ordered from

P.O. Box 2683
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I am enclosing \$3.00 for each copy of the book, GAMES GRAFFITI: Language Arts Games to Make for Young Children. Please mail copies to:

Name _____

Address _____

zip

(be sure to give zip)